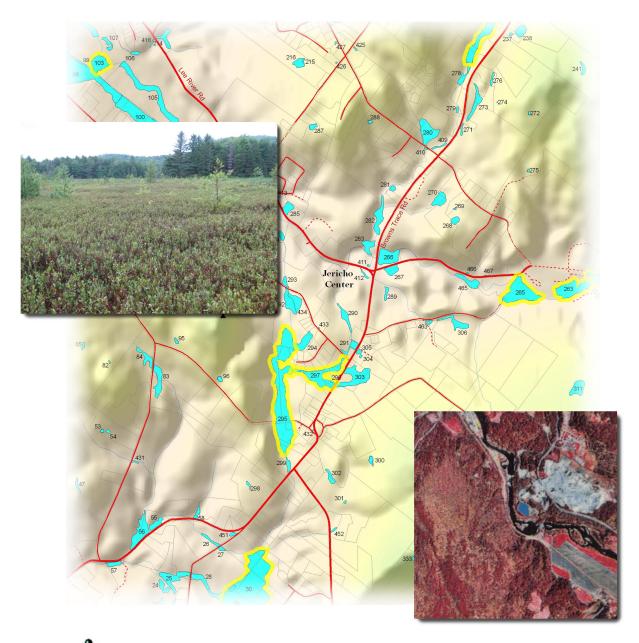
# Jericho Remote Wetlands Inventory and Assessment





Prepared for the Jericho Conservation Commission

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#### 1.0 Introduction

In 2011, the Town of Jericho Conservation Commission retained Arrowwood Environmental, LLC to conduct a remote wetlands inventory in the town. This Inventory and Assessment project was conducted from May 2011 to January 2012. This inventory consisted of 1) a remote identification and mapping of wetlands and potential wetlands in the town of Jericho, Vermont; 2) a public access survey of wetlands; and 3) a remote functions and values assessment of these mapped wetlands and potential wetlands.

For the purposes of this inventory, a wetland is defined as an area that is inundated by surface or ground water with a frequency sufficient to support organisms that depend on saturated or seasonally saturated soil conditions for growth and reproduction. For any particular site to be considered a jurisdictional wetland, there needs to be the following three criteria present: 1) hydrophytic (wetland) vegetation, 2) hydric soils, and 3) wetland hydrology. The boundaries of wetlands, however, cannot be determined and/or delineated remotely. The boundaries present on the attached inventory map are for planning purposes only; detailed fieldwork is required to determine the actual presence and extent of wetlands.

## 2.0 Methodology

The methodology used in mapping and assessing wetlands is outlined below. This methodology includes details on the methods used in remotely identifying and mapping wetlands as well as an overview of the ranking procedures used in assessing wetland significance.

## 2.1 Remote Mapping Methodology

The landscape analysis represents the first step in conducting an inventory of a Town's wetlands. As part of this Phase, Arrowwood Environmental (AE) identified and mapped the wetlands in Jericho through a comprehensive review and interpretation of available paper and digital resource inventories, maps and photographs.

Information sources that were reviewed during the landscape analysis process include: 1:40,000 Color Infra-Red aerial photographs, Natural Resources Conservation Service soil survey maps, 2000s Orthophotography (black and white), 2009 National Aerial Imaging Program (NAIP) Color orthophotographs, Chittenden County orthophotographs, Vermont Significant Wetlands Inventory maps and U.S. Geological Survey (USGS) topographic maps.

In general, the process for identifying and mapping wetlands starts with the Color Infra-Red aerial photographs (CIR photos). Wetlands identified from the CIR photos were transferred directly to a digital wetlands database created in an ArcGIS platform using the digital

Orthophotographs as a base map. Polygon lines (approximate wetland boundaries) were drawn in this digital wetlands map using common landscape features present in both the CIR photos and the digital Orthophotographs. The digital Natural Resource Conservation Service (NRCS) hydric soils maps, Vermont Significant Wetlands Inventory (VSWI) maps, and U.S. Geological Survey (USGS) topographic maps were also consulted during this inventory. As each wetland was mapped, it was given a preliminary natural community name based on Wetland, Woodland, Wildland. A Guide to the Natural Communities of Vermont (Thompson and Sorenson 2000). Each of the data sources that were used during this inventory is described in detail below.

#### 2.1a 1:40,000 NAPP Color Infra-Red Aerial Photographs (CIR)

The CIR photos were the main data source used to identify wetlands for this inventory. The data sources described below were used to verify or confirm wetlands discovered using the CIR photos. This set of aerial photographs was flown in the spring (April-May) of 1992-1993 at a scale of 1:40,000. These are "false color" photos which combine infrared reflectance with the green and red visible bands. These photos were examined at 3X magnification under a stereoscope. The use of the stereoscope allows the photos to be viewed in three dimensions, thus enabling the interpreter to see elevation. These photos have proven to be the most useful tool for remotely identifying wetlands in Vermont. When evaluating aerial photographs, the most important characteristic is the "photosignature". The photosignature is the way that a feature, in this case a wetland, presents itself on the photograph. Water on the CIR photos presents a very clear, dark photosignature that is distinct from most other features in the photos.

Many wetlands, however, do not have standing water and the wetland photosignature may be unclear. In some cases, it was possible to confirm the presence of a wetland at these sites by using one of the other wetland data sources. At other sites, it was not possible to confirm or deny the presence of a wetland. In these cases, the site was included in the wetlands map but with a lower confidence level. Because there is some uncertainty associated with remotely mapping wetlands (particularly small wetlands), the "Confidence" rank is meant to track that potential error (see Section 2.2).

#### 2.1b Vermont Significant Wetlands Inventory Map (VSWI)

The VSWI map is based on the National Wetlands Inventory Map (NWI) and is used as the standard regulatory wetlands map for Vermont by the State Wetlands Office. In many cases, the location of the wetland from the VSWI map is inaccurate and does not reflect the actual location of the wetland. Using the CIR photos and other map sources, these locations were corrected on the Jericho Remote Wetlands Inventory Map. In most instances, the wetlands on the VSWI map are indeed wetlands. There are a few instances where information from other map sources suggests that the site is not actually a wetland. If a particular site did not appear to be wetland based on other sources, it was not included on the final town wetlands map.

All wetlands that appear on the VSWI are considered Class II wetlands, as defined in the State of Vermont Wetland Rules. In addition, any wetland that is hydrologically connected to a

wetland on the VSWI map is also considered a Class II wetland. These wetlands are offered a certain amount of regulatory protection. Because remote sources cannot always determine if one wetland is hydrologically connected to another wetland, the classification of the wetlands identified was not included in this inventory. However, all wetlands that are indicated to be VSWI wetlands in the wetland map can be considered Class II wetlands.

#### 2.1c USGS Topographic Maps

The USGS topographic maps were used as a secondary map source to better understand a wetlands position on the landscape. The topographic position can give insight to the nature of a wetland and the potential for wetlands to occupy certain areas.

### 2.1d Digital Orthophotographs

Orthophotographs are aerial photographs that have been geometrically corrected such that the scale is uniform. The ortho-rectification process removes photographic distortion and adjusts for topographic relief, camera tilt, etc leaving an end product on which true distances can be measured.

Unlike the CIR photos, the photosignature of wetlands in many orthophotographs is often unclear. While wetlands can be readily identified on CIR photos under a stereoscope, digital orthophotos are used as a basemap upon which the wetland boundaries are mapped by comparing common landscape features on the two images.

### 1:5,000 VTOrthophotographs

The State of Vermont, through the Vermont Center for Geographic Information, collects black and white digital orthophotographs for the entire state on roughly a 10 year cycle. The most recent photos for the Jericho area were taken in 2007 at a scale of 1:5000 (0.5m).

## 1:1250 Chittenden County Orthophotographs

In 2004, several Chittenden County towns, including Jericho participated in the collection of high resolution orthophotographs. This imagery included both a black and white series as well as true-color with the addition of a 4th infra-red band. This imagery was collected at a scale of 1:1250 (0.16m).

More information about orthophotography available in Vermont is available at <a href="www.vcgi.org">www.vcgi.org</a>.

#### 2.1e Natural Resource Conservation Service (NRCS) Soil Survey

A digital copy of the Chittenden County Soil Survey was used during this inventory. A map of all hydric soils in the town was used to identify areas that may contain wetlands. The hydric soils in the town consisted of the following soil types: Cabot, Enosburg, Limerick, Livingston, Munson, Muck (unclassified), Peachum, Scantic and Scarboro. Each soil type forms under

different environmental conditions and can give clues to the nature of the wetland or potential wetland site.

As mentioned above, the presence of a wetland is dependent on hydric soils, wetland hydrology and wetland vegetation. Some areas of hydric soil, therefore, are not wetlands. Wherever hydric soils were present, other remote data sources were used to determine if the site likely contained a wetland. In many circumstances, other data sources led to the conclusion that wetlands occurred only in part of the hydric soil area. In these cases, polygon lines were redrawn to reflect probable wetland boundaries. The NRCS hydric soils boundary and the approximate wetland boundary are therefore not identical. In most cases, the wetland areas are smaller than the hydric soil areas. In addition, because of inaccuracies in the soils map, some wetlands were identified in areas that were mapped as non-hydric soils. In these cases, hydric soils likely exist on the site, but the actual type would need to be determined by a field visit.

## 2.2 Wetland Confidence

Using all of the above resources, a map of the wetlands and potential wetlands in Jericho was created. Since this inventory is a remote inventory, in some cases there is some uncertainty about whether a particular site actually contains a wetland. The wetland "Confidence" field in the database contains data about this uncertainty. For sites where the presence of a wetland is not in doubt, the site was given a "High" confidence rating. Most of these wetlands also shown appear on the NWI or VSWI wetland maps. Where a wetland does not already appear on those maps, there is usually an obvious wet photosignature in the CIR or orthophotos.

For some wetlands, however, the evidence is not as clear cut. If there is moderate evidence that the site contains a wetland, but still some doubt, the site was given a "Medium" confidence ranking. Finally, sites that show some limited evidence of a wetland were given a "Low" ranking. These include sites that are either marginally wet or sites where the native vegetation is disturbed and therefore difficult to interpret remotely. In some cases these sites may be wet in the spring (and show on the photos as such) but may dry up in early summer and not remain wet long enough to support wetland vegetation. These "Low" confidence wetlands were included in the map to prevent the loss of this data. Ultimately these sites need to be visited to determine if a wetland actually exists on the site. For this reason, however, we consider these to be "potential" wetlands.

#### 2.3 Remote Wetland Functions and Values Assessments

Wetlands were assessed remotely utilizing information available from existing maps. The assessment involves evaluating a wetland based on its vegetation, hydrology, habitat diversity, topographic position, shape, size and position in the watershed for select functions and values. The Vermont Wetland Evaluation Form, US Army Corps of Engineers Highway Methodology Handbook and Golet Model Wetland Evaluation Form were used as guides for establishing the functions and values criteria. As a result of the assessment, each wetland is given a functional

score based on a scale of Low/Medium/High. Each mapped wetland was assessed for the following functions and values:

- 1. Water Storage for Flood Water &/or Storm Runoff (Flood Control)
- 2. Surface and Ground Water Protection (Water Quality)
- 3. Wildlife Habitat
- 4. Fisheries Habitat
- 5. Exemplary Wetland Natural Community
- 6. Rare, Threatened or Endangered Species Habitat
- 7. Education & Research in Natural Sciences
- 8. Recreation Value and Economic Benefits
- 9. Open Space & Aesthetics
- 10. Erosion Control through Binding and Stabilizing Soil

The following is a description of how wetlands perform the specified function and/or value listed above as well as notes on how the wetlands in Jericho were ranked. The functional assessment is based upon whether the wetland has the capacity for the function or value *and* whether there is an opportunity for the wetland to perform that function.

#### 2.3a Water Storage for Flood Water &/or Storm Runoff

Certain wetlands are important for flood water control because they retain and slowly release floodwaters. These wetlands are typically associated with streams or rivers. In order for a wetland to perform this function, there must be an expandable basin present that allows room for the floodwater to disperse. This expandable basin and the presence of persistent vegetation have the effect of slowing the water down and diffusing the energy of the floodwater. This floodwater is then slowly released.

The most significant wetlands for this function are located upstream of significant natural resources or human resources such as developed areas, culverts, and roads. In these circumstances, the upstream wetlands may be protecting these resources from floodwaters, such that any activity that impairs the wetland's ability to perform this function will often have serious impacts to downstream resources.

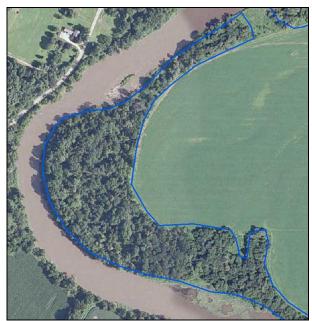


Figure 1. The Jericho Bend Floodplain Forest along the Winooski River is significant for floodwater control.

Ranking Considerations: Only streams associated with surface waters were ranked for this function. In general, wetlands along higher order streams and rivers were ranked higher than wetlands along lower order surface waters. Larger wetlands typically have longer "retention times" (the amount of time that water remains in a wetland) and were therefore ranked higher than smaller wetlands of the same type. The physiogomony, or physical structure, of a wetland also is important in determining if a wetland is significant for floodwater retention. Floodplain forest wetlands were historically the floodwater control mechanism on the landscape. Most of these sites, however, were converted to agriculture and many of our larger rivers are now dammed. Though it is difficult to remotely determine if these sites are still functioning in their historic capacity, most of them were ranked Medium or High for their potential.

#### 2.3b Surface and Ground Water Protection (Water Quality)

Some wetlands can be important for filtering sediments and nutrients, such as phosphorus and nitrogen, from surface waters resulting in improved water quality.

Wetlands that retain nutrients generally have diffuse or sinuous drainage pathways which slow down the flow of water. Slower water velocity provides more opportunity for sediments and nutrients to settle out and to be absorbed by vegetation. This is especially important for nutrients such as phosphorus which is typically bound to sediment particles.

The velocity of the water moving through a wetland is determined by slope, landscape position and the outlet conditions. Wetlands with constricted outlets generally have much slower water velocities and greater potential for sediment and nutrient removal. The presence of persistent vegetation is also important for slowing down water velocities.

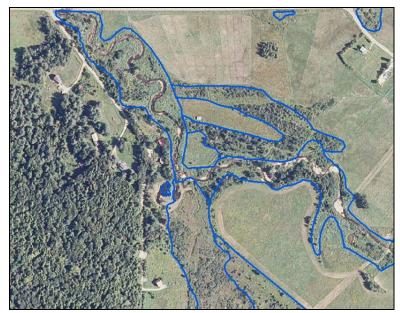


Figure 2. This wetland along Mill Brook is significant for water quality

The water quality function takes on particular importance in impaired watersheds where water and its uses are diminished. The opportunity for a particular wetland to perform this function is determined by the presence of agricultural lands, urban impervious surfaces, steep slopes, and areas of impaired water quality. Wetlands that recharge a wellhead protection area or contribute to the flows of Class A surface water may also be of particular importance.

Ranking Considerations: As mentioned above, the manner and rate that water moves through a wetland is important in determining its functionality for water quality. Certain types of wetlands are inherently better at performing this function than others. In addition, the opportunity to perform his function plays a role in the ranking process. For example a Shallow Emergent Marsh with good apparent water quality characteristics surrounded by intact forest may rank Low. The same wetland if located in between an agricultural field and the Brown's River, on the other hand, may rank High simply because of its position on the landscape and opportunity to perform this function.

#### 2.3c Wildlife Habitat

Wildlife use of wetlands is widely variable and dependent upon the size, diversity and structure of the wetland and the species of wildlife present in the area. In general, the wetlands that are the most valuable for wildlife are those that have multiple community types, greater vegetative diversity, some open water and multiple layers of vegetation. The interspersion of the open water and different vegetation cover can also be important for determining wildlife use. In general, a greater diversity of wildlife is often found in wetlands that have open water that is extensively interspersed with vegetation. The interspersion of different vegetation or cover types is also important.

Large wetlands, with ample space and a variety of food and cover resources often harbor a greater diversity of wildlife. Smaller wetlands are also important for wildlife when viewed not as individual wetlands but as groups or clusters of wetlands on the landscape. These smaller wetlands often work in concert to provide habitat for species that utilize several different wetlands throughout their movements on the landscape.



Figure 3. The interspersion of open water, herbaceous vegetation and scattered trees make this beaver wetland significant for wildlife habitat.

Ranking Considerations: Wildlife habitat is perhaps one of the hardest functions to rank because it is a very broad category. So many different species of wildlife use wetlands during different parts of their life cycle, it is difficult to point to specific habitat features that are common to them all. The habitat required for black bear feeding in the early spring (typically in wetlands with ground water discharge like Seeps) is very different than that required by mallards (open water areas). Because of this, as mentioned above, we consider wildlife diversity when ranking wetlands for this function. It is very difficult to show with these ranks, however, the importance that a wetland habitat may have to a particular species. The Seep wetland types, for example, typically rank Low or Medium because, compared to Beaver Wetlands, the overall number of species that use that Seep is relatively low. However, for the bear or dusky salamanders that rely on the seeps, those wetlands are a vital part of their life cycle.

With the exception of agricultural fields and very small roadside wetlands, most wetlands received at least a Low rank because some wildlife species is known to use those wetland

types. As the wetland habitat diversity increases, so does the wildlife diversity and subsequent rank.

#### 2.3d Fisheries Habitat

The fisheries function is determined primarily upon a wetland's connection to permanent surface water that could provide fish habitat. Wetlands that are associated with these permanent surface waters can increase the fisheries habitat by: 1) providing pools and refugia during periods of low water; 2) providing shade to the surface waters thereby lowering the temperature of the water (which is crucial to some species of fish); 3) providing stream bank stability thereby decreasing the amount of sediments in the water system; 4) providing undercut banks which offer spawning, nursery, feeding and cover habitat for fish and; 5) providing an input of cool, clean spring water into the surface water system.

Ranking Considerations. In general, only wetlands that are associated with permanent surface water (lake and river systems) are ranked for this function. The exception to this is ponds. Natural or man-made ponds can offer fish habitat, but are typically ranked Low in remote inventories because it is hard to verify. Other wetlands such as Shallow and Deep marshes and Beaver wetlands typically rank a Low- Medium if they are associated with surface waters and appear to have some of the characteristics listed above. Ground-water discharge wetlands such as Seeps are typically ranked Low to Medium if they form the headwaters of mountain streams. Finally, Floodplain Forests are typically ranked Low-Medium because of the streambank stability, shading and undercut banks that they provide. A rank of High is typically reserved for larger wetland systems associated with lakes or major rivers.

#### 2.3e Exemplary Wetland Natural Community

Like uplands, all of the wetlands in the state generally fit into a natural community type based on the Vermont classification. This function is meant to highlight wetlands that harbor uncommon or rare natural community types or excellent examples of more common natural community types. Rare wetland communities found in Jericho include Dwarf Shrub Bogs and Poor Fens. In addition, the Vermont Wetland Evaluation Form also lists the following community types as significant for this function: Bulrush Marsh, Cattail Marsh, Northern White Cedar Swamp, Red Maple-Black Ash Seepage Swamp and Spruce-Fir-Tamarack Swamp. A wetland may also be significant for this function if it contains old growth, deep accumulation of peat or is tracked by the Vermont Nongame and Natural Heritage Project.



Figure 4. Otter Bog contains a rare wetland natural community and is significant for the Exemplary Natural Community Function.

Ranking Considerations. In 2009, J. Mohr did some work mapping and ranking natural communities in Jericho. The results of that study were incorporated into this inventory as much as possible. A wetland that was identified as having state significance was ranked Medium or High for this function. A wetland that was considered to be locally significant was ranked Low or Medium for this function. In addition, any other rare or uncommon wetland communities (even those that did not receive a site visit) were ranked for this function based on presumed significance.

#### 2.3f Rare, Threatened and Endangered (RTE) Species Habitat

Like natural communities, each species in the state is ranked based on its rarity. A wetland is considered significant for this function if there is credible documentation of the presence of a Federal or State listed Rare, Threatened and Endangered species of plant or animal. This includes the historic (within the last 10 years) presence of a rare element in the wetland. In addition, a wetland will be considered significant for this function if multiple uncommon species are present.

The opportunity for this function is based on the presence of appropriate habitat for RTE species.

<u>Ranking Considerations.</u> Since this study is a remote inventory and analysis, no new data on rare species was obtained. Therefore, the ranking of this function is based solely on existing

data on rare, threatened and endangered species in the town. In some cases, wetlands in this study were given a low score for this function if the habitat was appropriate for RTE species, even though no species inventory has yet been conducted.

#### 2.3g Erosion Control through Binding and Stabilizing Soil

Many wetlands located in areas where erosive forces are present are important for this function. This includes wetlands along rivers and streams and wetlands along lakes and ponds where there is enough fetch to produce erosion along the shore. The most important element in a wetland significant for this function is the presence of persistent vegetation, especially woody vegetation such as trees and shrubs. The roots of this vegetation act to bind the soil and prevent it from eroding. Wetlands that perform this function upstream of biologically significant areas such as spawning habitat or significant natural communities or human structures such as house or roads are very valuable.



Figure 5. This wetland sits along the Lee River and helps to stabilize the banks, providing erosion control.

<u>Ranking Considerations.</u> In Jericho, wetlands that are found along the banks of the larger rivers such as the Winooski and the Browns Rivers are most significant for this function. These rivers tend to have much higher erosive forces and more human structures along their banks. Wetlands along smaller streams are also important for this function but are rarely ranked High.

#### 2.3h Open Space & Aesthetics

The Open Space function is determined primarily by a wetland's position in the landscape in relation to visibility by the public. Wetlands that can be readily viewed by the public such as those on public lands or along the road network are often significant for this function. These wetlands are important because they enhance the likelihood of observing wildlife and wildflowers. Wetlands that have prominence on the landscape or distinct visual features are typically ranked at a higher level for this function. Open space becomes a particularly important function in more developed areas. Wetlands that are adjacent to or near residential developments may also be significant for this function, even if the development is not along a public road.

<u>Ranking Considerations</u>. Judging what may be visually pleasing for a wide range of people is a difficult task. One not made easier by the fact that this was primarily a remote inventory. Nevertheless, wetlands that are larger and adjacent to roads and other areas of public visibility were ranked for this function. Wetland type also plays a part in the ranking. A scrubby old field wetland, for example, was not ranked as high as an open Shallow Emergent Marsh. Only a handful of wetlands were ranked as high as Medium, these being large, diverse wetlands that are readily visible along the roads in the town.

#### 2.4i Recreation Value and Economic Benefits

This function is determined based on the presence or likelihood of recreational activities occurring within the wetland or identifying wetlands that provide economic benefits. This includes wetlands that provide habitat for species that can be fished, hunted or trapped and/or the presence of wild foods that are harvested.

<u>Ranking Considerations.</u> This function is particularly difficult to assess on a remote basis. Local knowledge of which wetlands are used recreationally or for hunting and trapping is crucial to accurately rank this function. In lieu of this knowledge, only wetlands with this "potential" can be ranked. Because of this, only a handful of wetlands were ranked Low for this function.

#### 2.3j Education & Research in Natural Sciences

Wetlands that are significant for Education and Research are generally those that have a history of use for these purposes or have the real potential to be used for these purposes. Publicly owned wetlands, wetlands with unique features and wetlands with RTE species are characteristics that may make a wetland significant for this function.

<u>Ranking Considerations.</u> Like the Recreation function, Education and Research is difficult to accurately assess in the remote inventory. For this reason, only those wetlands that appear to have the potential to perform this function were ranked. This consists primarily of wetlands that are on or near school property in the town.

#### 2.3k Function and Values Summary

In addition to a ranking for each of the functions and values described above, the wetland database also includes a ranking summary of this data. The Functions and Values Summary field presents the results of a summary analysis done on the functions and values scores for each wetland. They were determined by converting the Low, Medium and High rank to numeral rankings and summing the ranks for each wetland. The higher the number in the summary field, the greater the overall functioning of the wetland. These numbers were used in the overall functional analysis presented in Section 3.2.

## 2.4 Public Access Inventory

The limitations of a remote inventory are implicit in its name: it is entirely conducted from remote data sources. In order to gain some amount of field information, a public access inventory was also included as part of this project. As part of this assessment, all of the public roads in the town of Jericho were driven and wetlands assessed from these roads. The purpose of the assessment was to 1) refine the physical boundaries of the wetland that was remotely mapped; 2) confirm the initial wetland natural community designation; 3) perform a functions and values assessment; and 3) document and map wetlands that were not identified by the remote assessment. For each wetland seen during this process, the following information was gathered: natural community type, a ranking of the functions and values, notes on the boundaries and extent of the wetland and notes on the significance of the wetland. All of this data was then incorporated into the final wetlands map.

#### 3. 0 Results

#### 3.1 Wetland Natural Communities

Essential to understanding wetlands in Jericho and throughout the state is a working knowledge of the natural community concept. Many people that spend time outdoors are likely familiar with the natural community concept, whether they know it or not. People understand, for example, that a hardwood forest (or "sugarwoods") is very different from a hemlock forest or dry oaky ridgetop. These different types of woods are different natural communities. A "natural community" is defined as an "interacting assemblage of organisms, their physical environment and the natural processes that affect them." (Thompson and Sorenson, 2000). This means that certain combinations of the physical environment (geology, soils, climate) give rise to certain assemblages of organisms. These assemblages or patterns of vegetation occur repeatedly across the landscape and are summarized as natural community types. These different natural community types in Vermont are described and classified based on their vegetation composition and structure. These types are described in detail in the book Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont. (Thompson and Sorenson, 2000).

Like upland natural communities (like those mentioned above), wetlands are also classified into different natural community types. All of the wetland natural communities that were mapped in Jericho during this inventory are listed in Table 1. This inventory documented 16 different wetland communities. This does not include agricultural fields, old fields, or ponds since these are not "natural" communities (though these were also mapped). It is likely that other natural community types exist that were not documented during this inventory. Because this was largely a remote inventory, field verification of the natural community types could not occur (except on a select few that had previous site visits or were seen during the Public Access Inventory).

In addition to the formal community classification, there are certain colloquial terms related to wetlands that are helpful to understand. The terms marsh, bog, and swamp for example are often used interchangeably when in fact they refer to specific types of wetlands. A marsh refers to a wetland that is dominated by herbaceous vegetation. A swamp refers to a wetland that is dominated by woody vegetation (either shrubs or trees). Dense shrub swamps are also sometimes referred to as shrub thickets. A bog refers to a wetland characterized by the build-up of peat (un-decomposed organic matter) and very acidic, nutrient poor conditions. A fen is also a wetland where peat accumulates but under more nutrient rich and less acidic conditions than bogs. Both of these "peatland" types are uncommon or rare. A wet meadow generally refers to a sedge-dominated wetland (as in a Sedge Meadow).

As can be seen from Table 1 below, there were a total of 470 individual wetlands mapped during this inventory. By contrast, the National Wetlands Inventory (NWI) map shows 276 individual wetlands in the town of Jericho. The difference in these two numbers can be attributed to two factors. First, the current inventory is much more accurate and presents a comprehensive map of wetlands in the town. Secondly, some of this variation is related to how wetlands are classified and mapped using the natural community concept. For example, when mapping a large wetland complex, multiple wetlands (broken out by natural community type) may be mapped, whereas the NWI map may only show a single large wetland.

Another way to analyze the data, then, is to look at overall acreage of wetlands mapped. The National Wetlands Inventory map has mapped a total of 922 acres of wetland in Jericho. The Vermont Significant Wetlands Inventory (VSWI) map, has mapped a total of 1118 acres of wetlands in the town. As can be seen from Table 1, the current inventory has documented approximately 1386 acres of wetland in the town. This includes both wetlands and potential wetlands (see Section 2.2).

Table 1. Summary of Wetlands in Jericho

Natural Community Type	# of Occurrences	Average Acreage	Total Acreage
Agricultural Field	53	1.5	79.2
Alder/Willow Swamp	65	3.7	238.8
Alluvial Shrub Swamp	4	3.5	14.1
Beaver Wetland	29	12.8	372.1
Cattail Marsh	3	0.1	0.2
Deep Broadleaf Marsh	3	4.5	13.5
Dwarf Shrub Bog	1	2.4	2.4
Floodplain Forest	26	4.3	112.5
Hemlock-Fir-Ash Seepage Swamp	7	17.2	120.7
Northern Hardwood Seepage Forest	5	7.2	36.1
Northern White Cedar Swamp	1	15.7	15.7
Old Field	79	2.0	157.5
Pond	79	0.3	25.5
Poor Fen	3	2.0	6.1
Red Maple-Black Ash Swamp	12	2.4	28.3
Seep	25	0.4	11.0
Shallow Emergent Marsh	66	1.8	118.9
Spruce-Fir-Tamarack Swamp	5	6.5	32.7
Vernal Pool	4	0.1	0.4
TOTAL	470	NA	1385.8

## 3.2 Functions and Values Analysis

The functions and values summary field in the attribute table associated with the wetlands map gives a quick analysis of the overall functionality of each wetland. As mentioned in Section 2.3k, the higher the number in this field, the greater the overall functionality of the wetland. We have identified 34 of the 470 wetlands that warrant distinction as the highest functioning wetlands in the town. These include Alder Swamps, Beaver wetlands, Deep Broadleaf Marshes, Floodplain Forests, Emergent Marshes and forested swamps. The location of these wetlands is shown in Figure 6. These can all be accessed in the database by sorting the functional summary field for sites with a score greater than 10. As can be seen in Figure 6.

most of these sites are located along surface waters, either Mill Brook or the Winooski, Lee or Browns River.

There are also some wetlands that scored 0 for overall functionality. These were mostly wet agricultural fields, wet old fields and small roadside wetlands. From remote sources, it appeared that these sites did not meet any of the criteria for the functions and values using the Vermont State Wetland Evaluation Form. Field analysis should still be conducted to determine functionality (of lack thereof) if the wetland is threatened by impact. In addition, some of these wetlands, may be considered Class II and may still be under the jurisdiction of one of the regulatory agencies operating in the state (see Section 4.0 for more detail).

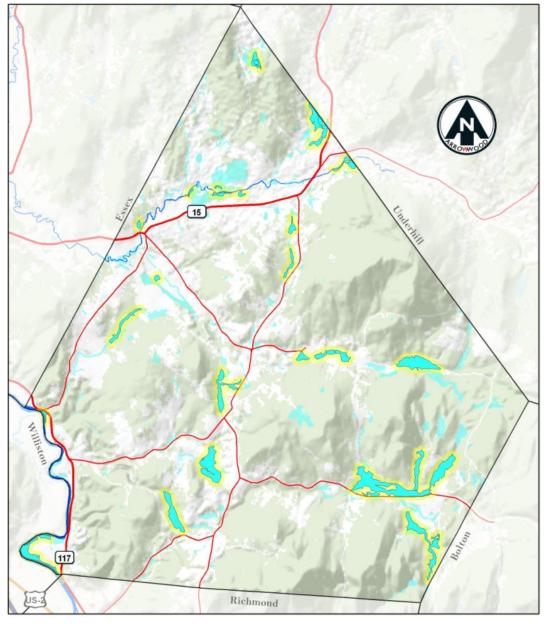


Figure 6. Thirty-Four Highest Functioning Wetlands in Town of Jericho

## 4.0 Wetland Regulation in Vermont

## 4.1 State of Vermont, Department of Environmental Conservation

In 2010, the Vermont State Legislature amended the Vermont Wetland Rules to update the rules originally adopted in 1990. According to the original rules, a wetland was under the purview of the Vermont Wetlands Office if it was a Class II wetland or contiguous to a Class II wetland. A Class II wetland was defined as something that appeared on the Vermont Significant Wetlands Inventory (VSWI) maps. Under this system, changing the "Class" of a wetland (from Class III to Class II for example) was a complicated process involving a determination by the Water Resources Board. Under the amended rules, however, "the secretary determines to merit protection...based upon an evaluation of the extent to which it serves the functions and values...". This means that changing the Class of a wetland can be done within the Agency of Natural Resources. Furthermore, the justification for the change can be based on the wetland performing certain functions or values.

The amended rules also include a list of wetlands that are "presumed significant". These include:

- 1. any wetland that is contiguous to a Class II wetland
- 2. any wetland that is the same type and threshold size as those mapped on VSWI maps
- 3. any wetland with persistent vegetation along a stream or river
- 4. vernal pools with amphibian breeding habitat
- 5. headwater wetlands
- 6. wetlands adjacent to impaired surface waters

For a complete list and actual wording, refer to the VT Wetland Rules adopted July 16, 2010.

Because a determination of jurisdiction (and therefore protection by the State) will, in many cases, be based on the presence of functions and values, the functional analysis associated with this inventory may be useful for those wetlands that are not already on the VSWI map. It must be noted, however, that only staff from the VT Wetlands Office can make an official determination about the Class of a wetland. The functional analysis, therefore, is to be used as a guide or a starting point from which further field-based information must be obtained, especially in the case of proposed development in the wetland or buffer zone.

If a wetland is determined to be a Class II wetland, any impact to the wetland or the wetland buffer requires a permit from the Vermont Wetlands Office. The buffer zone for Class II wetlands is typically 50' from the wetland boundary. The wetland boundaries shown on the attached map should not be considered delineated or jurisdictional boundaries. If a project involving any dredging, draining or filling (earth work of any kind) is proposed near a wetland shown on the map, a wetland consultant should be hired (by the applicant) to delineate the

boundary of the wetland. In addition, a visit from a Vermont state wetlands ecologist is recommended.

## 4.2 United States Army Corps of Engineer: New England District

In addition to the State of Vermont, wetlands are regulated by the United States Army Corps of Engineers (ACOE). Unlike the State of Vermont, the ACOE makes no distinction between classes of wetlands.

The ACOE regulates work and structures that are located in, under or over navigable waters of the United States under Section 10 of the Rivers and Harbors Act of 1899, and the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Waters of the United States are navigable waters, tributaries to navigable waters, wetlands adjacent to those waters and/or isolated wetlands that have a demonstrated interstate commerce connection. (US Army Corps of Engineers New England District Webpage: <a href="http://www.nae.usace.army.mil/Regulatory">http://www.nae.usace.army.mil/Regulatory</a>)

In the New England District, the ACOE has issued State General Permits to expedite the review of minimal environmental impact associated with the aquatic environment of navigable and inland waters and wetlands. The Vermont General Permit (GP) utilizes a tiered approach with categories linked to impact thresholds. These thresholds are listed in the permit and determine the level of review necessary from the federal perspective. The threshold levels are intended to ensure that the GP results in no more than a minimal impact to the aquatic environment. Activities with minimal impacts qualify for authorization under the GP in either of two categories:

Category 1: Non-reporting. Projects meeting Category 1 criteria and which are in full compliance with the general conditions of the GP may be authorized under the GP without notifying the ACOE. Although Category 1 projects are non-reporting, the ACOE reserves the right to require either an Individual Permit or Category 2 review if there are concerns for the aquatic environment or any other factor of the public interest.

Category 2: Reporting. An application to and written authorization from the ACOE is required for these projects. The ACOE will coordinate review of all Category 2 activities with Federal resource agencies and the State of Vermont and may require project modifications or mitigation to minimize impacts. The ACOE, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), and VT Agency of Natural Resources (VT ANR) comprise the interagency review team. The ACOE also coordinates with VT Department of Historic Preservation (VT DHP) as to potential impacts of a project on historic properties. The ACOE, VT ANR and VT DHP review activities with impacts between 3,000 square feet and 5,000 square feet. The ACOE reviews projects with impacts greater than 5,000 square feet with the entire interagency team and VTDHP. (United States ACOE Webpage: http://www.nae.usace.army.mil/Regulatory/SGP/VT\_PGP.pdf)

The ACOE Vermont State General Permit can be found at the following website: <a href="http://www.nae.usace.army.mil/Regulatory/SGP/VT\_PGP.pdf">http://www.nae.usace.army.mil/Regulatory/SGP/VT\_PGP.pdf</a>

Projects that do not qualify for the ACOE Vermont General Permit, are reviewed through the Individual Permit (IP) process. Projects with impacts greater than one acre must be reviewed through the IP. The ACOE bases the decision to issue the IP on evaluation of impacts during the Public Interest Review process. In addition, the ACOE also evaluates the project's compliance with the guidelines outlined in Section 404 of the Clean Water Act. The guidelines restrict discharges of dredged or fill material where less environmentally damaging, practicable alternatives exist. When unavoidable impacts occur, the ACOE requires all appropriate and practicable action be taken to mitigate such impacts. The Public Interest Review is the process the ACOE uses to evaluate the probably and cumulative impacts of the proposed activity and its intended use on the public interest. The ACOE gives consideration to comments of federal, state, and local agencies and other experts as well as the general public. Unless the project is contrary to the public interest and does not comply with the Section 404 guidelines, the ACOE will grant a permit.

#### 5.0 Conclusions

The Remote Wetlands Inventory identified 470 wetlands and potential wetlands in the town of Jericho. This includes 16 different natural community types from the common Shallow Emergent Marsh to the rare Dwarf Shrub Bog and Poor Fens and comprises approximately 1385 acres of wetlands. The remote functions and values analysis ranked each wetland based on the likelihood that it performs any of the 10 accepted functions and values. Approximately 34 wetlands in the town were identified as overall High functioning wetlands which are vital to the ecological landscape of the town. These include wetlands that are important for flood control, water quality, erosion control and wildlife habitat, among others. We hope that this wetlands map and report will help educate the town about their wetlands and serve as a valuable planning tool for town officials.

## 6.0 References

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US Army Corps of Engineers Highway Methodology Workbook: Supplement. September 1999.

# Appendix 1

## **Metadata for Wetland Attribute Table**

## **Appendix 1: Metadata for Wetland Attribute Table**

ID A unique identification number

**NATCOM** Natural Community. Lists the most likely or most dominant natural community for the site.

**NATCOMM2** Secondary Natural Community. Lists the natural community(s) that may be co-dominant for the site, or

dominant community if there is ambiguity about NATCOM designation.

**CONFIDENCE** M=Medium, H=High, C=Confirmed.

**COMMENTS** Comments. Comments on the ecology, hydrology or vegetation based on field or remote observations.

VSWI Vermont Significant Wetlands Inventory, Y/N, Yes/No. A "Y" denotes that the wetland is found on the

VSWI map and is therefore a Class II wetland.

**HYDRIC** Y/N. Yes/No. Indicates if the wetland or part of the wetland occurs on a mapped hydric soil. See Report

Section 2.2e for discussion.

**HYDRICTYPE** Hydric Soil. NRCS Digital Soils Map. If the site contains hydric soils in any part of the wetland, the type of

soils are listed in this attribute column. An NA denotes that the site does not contain hydric soil.

**VP HABITAT** Y/N. Yes/No. Indicates whether or not the wetland may contain habitat for amphibians associated with

vernal pools.

**FIELD\_ID** The wetland number that corresponds to the number on the field data forms. Used for public access survey.

FLOODWATER Water Storage for Flood Water and Storm Runoff Function. L/M/H. Low/Medium/High functionality.

WTRQUALITY Surface and Ground Water Protection (Water Quality) Function. L/M/H. Low/Medium/High functionality.

WILDLIFE Wildlife Habitat Function. L/M/H. Low/Medium/High functionality.

**FISHERIES** Fish Habitat Function. L/M/H. Low/Medium/High functionality.

**EXEMPLRYNC** Exemplary Wetland Natural Community Function. L/M/H. Low/Medium/High functionality.

RTE Rare, Threatened or Endangered Species Habitat Function. Y/N. L/M/H. Low/Medium/High functionality.

**EROSIONCTL** Erosion Control through Binding and Stabilizing the Soil Function. Y/N. L/M/H. Low/Medium/High

functionality.

**AESTHETICS** Open Space and Aesthetics Function. L/M/H. Low/Medium/High functionality.

**REC\_ECON** Recreation Value and Economic Benefits Function. L/M/H. Low/Medium/High functionality.

EDUC\_REC Education and Research in Natural Sciences Function. L/M/H. Low/Medium/High functionality.

**FXNVALSUM** Function and Value Summary. Integer. Summary value of functions and values analysis. A higher number

indicates greater overall functionality. See report Section 2.4k for details.

ACRES Acres. Integer. Lists the digitally calculated acreage for each site.

**CONSERVED** Conserved status. Lists the conserved status of each wetland. Wetlands may be either partially or entirely on

publically or privately conserved land. Conservation status derived from 2009 Public Conserved Lands

database from VCGI and 2007 Vermont Land Trust data.

# Appendix 2

## **Attribute Table of all Wetlands and Potential Wetland**

Wetland I  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Floodplain Forest Floodplain Forest Floodplain Forest Floodplain Forest Agricultural Field Agricultural Field Shallow Emergent Marsh	Natural Community 2	Confidence H H	Comments Previously mapped and ranked FF, Jericho Bend	VSWI I	N	NA	HABITAT N	М	R QUALITY M	L	ERIES	NC H	RTE N	CTL H	L	N N	13	24.9	
3 4 5 6 7 8 9 10 11 12 13 14 15 16	Floodplain Forest Agricultural Field Agricultural Field		Н																	
4 5 6 7 8 9 10 11 12 13 14 15	Agricultural Field Agricultural Field			Open water near ag field with trees on edge, may be old oxbow	Υ	N	NA	L	L	M	M	L	N	N	L	N	N N	7	1.1	
5 6 7 8 9 10 11 12 13 14 15	Agricultural Field		M	Not maped as part of Jericho Bend FF, but may be a part of it	N	N	NA	N	M	M	L	L	M	N	Н	L	N N	12	4.4	
9 10 11 12 13 14 15			L	Low area in ag field, open water in spring, but may not be a wetland	N	N	NA	N	N	N	N	N	N	N	N	N	N N	0	0.5	
9 10 11 12 13 14 15	Shallow Emergent Marsh		L	Marginally wet area in ag field, may not be wetland	N	Υ	Limerick	N	N	N	N	N	N	N	N	N	N N	0	0.7	
9 10 11 12 13 14 15	•	Agricultural Field	Н	Looks like old ag field reverting to marsh	Υ	Υ	Limerick	N	M	М	M	L	N	N	М	N	N N	9	7.8	
9 10 11 12 13 14 15	Old Field	Alder/Willow Swamp	С	Mixed shrubby/herbaceous roadside wetland	Y	Y	Limerick	L	N	L	L	N	N	N	N	L	N N	3	0.6	Public, Part
10 11 12 13 14 15	Alder/Willow Swamp	Red Maple-Black Ash Seepage Swamp	C	Nice looking wetland along stream, mixture of shrub and open types	Y	Y	Scantic	N	М	L	М	L	N	N	M	L	N N	9	3.7	
11 12 13 14 15 16	Pond	D 114 1 D1 1 4 1 0 0	Н	Man-made pond along stream	N	Y	Scantic	N	N	L	L	L	N	N	N	N	L N	4	0.2	
12 13 14 15 16	Alder/Willow Swamp	Red Maple-Black Ash Seepage Swamp	C	Mixture of alder and hardwood trees, along stream	Y	N	NA NA	N	L	L	L	N N	N N	N N	L	L	N N N N	5	0.5 0.5	
13 14 15 16	Shallow Emergent Marsh	Alder/Willow Swamp	U	Shrubby wetland along stream	Y	IN N	NA NA	N N	L N	L	L	N L	N N	N N	L N	IN N	IN IN	4	0.5	
14 15 16	Pond Alder/Willow Swamp	Old Field	С	Man-made pond along stream Shrubby wetland along stream	Y	IN NI	NA NA	IN NI	IN I	L.	L	N	N N	N	IN I	N N	N N	4	1.0	
15 16	Agricultural Field	Old Field	C	Small wet depression in field	n N	N N	NA NA	N N	N	L N	N	N	N	N	N	N N	N N	0	0.2	
16	Alder/Willow Swamp		C	Nice looking shrub swamp along stream	IN V	V	Scantic	N	M	IN I	IN I	IN I	N	N	M	N N	N N	7	2.8	
	Agricultural Field		ı	Looks only marginally wet, may not be a wetland	N N	Y	Scantic	N	N	N	N	N	N	N	N	N	N N	'n	0.1	
17	Floodplain Forest		H	Narrow band of forest along River, some open water in backswamp	Y	Ý	Scantic	N	M	M	ï	Ĺ	N	N	H	N	N N	9	6.6	
18	Floodplain Forest		M	Narrow band along river, looks more early successional than site to north	Ý	N	NA	N	M	M	Ē	Ē	N	N	H	N	N N	9	4.5	
19	Old Field		Ë	Potentially wet clearing	N	Y	Scantic	N	N	N	Ĺ	N	N	N	N	N	N N	1	1.0	
20	Old Field	Alder/Willow Swamp	L	Needs field verification, looks shrubby	N	N	NA	N	L	L	L	N	N	N	L	N	N N	4	0.6	
21	Pond	, , , , , , , , , , , , , , , , , , ,	Н	Man-made, along drainage	Υ	Υ	Munson	N	N	N	L	L	N	N	N	N	L N	3	1.3	
22	Old Field		M	Small swale below pond	Υ	Υ	Munson	N	N	N	L	N	N	N	L	N	N N	2	0.5	
23	Agricultural Field		M	Marginally wet area in agricultural field	N	N	NA	N	N	N	N	N	N	N	N	N	N N	0	0.3	
24	Agricultural Field		M	Marginally wet area in agricultural field	N	Υ	Munson	N	N	N	N	N	N	N	N	N	N N	0	1.1	
25	Old Field		M	Looks like marginally wet field, boundaries uncertain	N	Υ	Munson	N	N	N	L	N	N	N	L	N	N N	2	3.5	
26	Alder/Willow Swamp		С	Narrow swamp along small stream	N	Υ	Limerick	N	L	L	L	N	N	N	L	N	N N	4	0.7	
27	Alder/Willow Swamp		С	Narrow shrub swamp along small stream	N	N	NA	N	L	L	L	N	N	N	L	N	N N	4	0.3	
28	Shallow Emergent Marsh		С	Marsh along drainage adjacent to swamp	Υ	Υ	Munson	N	N	L	L	N	N	N	L	L	N N	4	1.5	
29	Beaver Wetland	Shallow Emergent Marsh	Н	Beaver wetland surrounded by Hemlock Swamp	Y	Υ	Munson and Scantic	M	L	M	Н	M	N	N	L	N	N N	9	4.5	
30	Hemlock-Fir-Ash Seepage Swamp		Н	Large, nice looking swamp	Υ	Υ	Munson and Scantic	L	N	L	M	L	Н	N	L	M	N N	10	47.9	,
31	Agricultural Field		L	Small, potential wet area in field	N	Υ	Munson	N	N	N	N	N	N	N	N	N	N N	0	0.1	Public, Entire
32	Alder/Willow Swamp	Shallow Emergent Marsh	Н	Large wetland along stream, floodplain position	Y	Υ	Limerick	N	M	М	M	L	L	N	Н	N	N N	11	30.9	
33	Seep	Northern Hardwood Seepage Forest	L	Potential seep in hardwood forest on slope	N	N	NA	N	N	L	M	N	N	N	N	N	N N	3	0.8	Public, Entire
34	Floodplain Forest	Emergent Marsh, Alder/Willow Swamp	M	Along stream, includes open water from old oxbow	N	Y	Limerick	М	М	М	M	L	N	N	M	N	N N	9	7.0	
35	Seep	Old Field	L	Small potential wetland adjacent to field, drains to SW	N	N	NA	N	N	N	L	N	N	N	N	N	N N	1	0.2	
36	Floodplain Forest	5	С	Narrow band of trees along Winooski, looks somewhat disturbed	N	N	NA	N	M	M	L	L	N	N	Н	L	N N	10	2.5	D: . D .
37	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	С	Nice looking wetland along stream	Y	N	NA	L	L N	L	M	L	N	N	M	N	N N	/	2.4	Private, Part
38	Pond		H	Man-made pond in field	Y	N	NA	N	N N	N	N N	L N	N	N N	N N	N N	N N N N	1	0.3	
39 40	Agricultural Field		М	Small wet area in agricultural field	N N	Y	Munson Munson	N N	N N	IN N	N N	N N	N N	N N	N N	IN N	N N	0	0.0	
40	Agricultural Field Agricultural Field		-	Small wet area in agricultural field Small swale in agricultural field	N N	Y V	Munson	IN NI	N N	IN NI	N	N	N N	N	N	N N	N N	0	0.0	
42	Agricultural Field			Small swale in agricultural field	N	V	Munson	N N	N	N	N	N	N	N	N	N N	N N	0	0.2	
43	Agricultural Field		ī	Wet swale in agricultural field	N	V	Enosburg	N	N	N	N	N	N	N	N	N	N N	0	0.1	
44	Agricultural Field		ī	Wet swale in agricultural field	N	Ý	Munson	N	N	N	N	N	N	N	N	N	N N	0	0.2	
45	Agricultural Field		ī	Wet swale in agricultural field	N	Ý	Munson	N	N	N	N	N	N	N	N	N	N N	0	0.2	
46	Pond		H	Man-made	N	N	NA	N	N	N	ï	Ĺ	N	N	N	N	L N	3	0.2	
47	Seep	Northern Hardwood Seepage Forest	M	Looks like seep or small drainage in forest	N	N	NA	N	N	Ë	M	N	N	N	N	N	N N	3	0.4	
48	Seep	Northern Hardwood Seepage Forest	L	Potential seep in forest, needs verification	N	N	NA	N	N	L	М	N	N	N	N	N	N N	3	0.3	
49	Shallow Emergent Marsh	Shallow Emergent Marsh	Н	Along stream, mapped as sedge meadow by J.Mohr	Y	N	NA	N	L	L	L	N	N	N	M	N	N N	5	2.1	
50	Seep	•	M	Stream-side seep or grassland	N	N	NA	N	L	M	M	L	N	N	M	N	N N	8	2.5	Private, Part
51	Seep		M	Stream-side seep or grassland	N	N	NA	N	L	M	M	L	N	N	L	N	N N	7	0.6	Private, Entire
52	Seep		M	Stream-side seep	N	N	NA	N	L	L	M	L	N	N	L	N	N N	6	0.1	Private, Entire
53	Pond		Н	Man-made	N	Υ	Cabot	N	N	N	L	L	N	N	N	N	L N	3	0.1	
54	Pond		Н	Man-made	N	N	NA	N	N	N	L	L	N	N	N	N	L N	3	0.2	
55	Beaver Wetland	Emergent Marsh	C	Nice looking beaver-influenced wetland, inlcudes open water	Υ	Υ	Munson	М	L	L	М	N	N	N	L	L	N N	6	1.2	
56	Shallow Emergent Marsh	Beaver Wetland	С	Nice looking wetland along stream	Y	Y	Limerick and Munson	N	L	L	M	N	N	N	М	L	N N	7	4.2	
57	Shallow Emergent Marsh	ALL AACH O	С	Herbaceous wetland along stream	N	N	NA	N	L	L	L	N	N	N	М	L	N N	6	0.8	
58	Shallow Emergent Marsh	Alder/Willow Swamp	С	Small stream-side wetland	Y	Y	Munson	N	L	L	L	N	N	N	L	L	N N	5	0.6	
59	Pond	Oballani Francis 184	С	Old pond site filled with cattails	Y	N	NA Mariana and Linearial	N	N	N	L	N	N	N	N	N	N N	1	0.1	Data Data
60	Agricultural Field	Shallow Emergent Marsh	С	Drainage through agricultural field; wet pasture	Y	Y	Munson and Limerick	N	N M	N M	N M	N	N N	N N	N M	N	N N N N	0	12.2	Private, Part
61	Shallow Emergent Marsh	Beaver Wetland	H H	Herbaceous dominated wetland along stream	Y	Y	Limerick	N N	IVI	IVI	IVI	L				IN N		9	3.9	
62	Pond		Н	Man-made Man made	•	N N	NA	N N	IN N	N N	M	L	N	N N	N N	IN N	N N N N	2	0.1	
63 64	Pond Pond		П	Man-made Man-made	N N	N N	NA NA	IN NI	IN NI	IN NI	IVI I	L	NI NI	N N	N N	N N	IN IN	3	0.1 0.1	
65	Pond		П	Man-made	N N	N N	NA NA	N N	N N	IN NI	i i	i i	N N	N	N N	IN I	N N	2	0.0	
66	Pond		н	Man-made	N N	N	NA NA	N	N N	N	Ī	Ĺ	N	N	N	N	L N	3	0.0	
67	Agricultural Field		Н	Wet sloping agricultural field	N	Y	Cabot	N	N	N	N	N	N	N	N	N	N N	n	1.2	
68	Pond		C	Man-made, filled in with cattails	Y	Ϋ́	Munson	N	N	N	Ĺ	L	N	N	N	N	N N	2	0.1	
69	Old Field		Č	Wet swale in field below pond	N	Y	Munson	N	N	N	N	N	N	N	N	N	N N	0	0.8	
70	Shallow Emergent Marsh		H	Herbaceous dominated wetland, larger out of town boundaries	Y	N	NA	L	Ĺ	M	M	Ĺ	N	N	L	N	N N	7	1.1	
71	Beaver Wetland	Emergent Marsh	 H	Nice looking, diverse wetland system along stream, inlcudes open water	Ý	Υ	Limerick	M	M	M	H	M	Ĺ	N	М	N	N N	12	14.4	
72	Pond	÷ -	H	Man-made	Ϋ́	N	NA	N	N	N	L	L	N	N	N	N	L N	3	1.3	
73	Pond		H	Man-made	Ϋ́	Y	Livingston	N	N	N	Ĺ	L	N	N	N	N	L N	3	1.1	
74	Pond		H	Man-made	Ϋ́	N	NA	N	N	N	Ĺ	L	N	N	N	N	L N	3	0.5	
75	Floodplain Forest	Alluvial Shrub Swamp	M	Large shrubby wetland along Browns River, needs field verification	Ϋ́	Υ	Limerick	N	M	M	L	L	N	N	М	N	N N	8	8.6	
76	Floodplain Forest	Alluvial Shrub Swamp	M	Large shrubby wetland along Browns River, needs field verification	N	Υ	Limerick	N	M	M	L	L	N	N	M	N	N N	8	4.4	
77	Floodplain Forest	Alluvial Shrub Swamp	L	Part of large shrubby wetland along Browns River, needs field verification	N	N	NA	N	M	М	L	L	N	N	M	N	N N	8	0.6	
78	Floodplain Forest	Alluvial Shrub Swamp	L	Part of large shrubby wetland along Browns River, needs field verification	N	N	NA	N	M	M	L	L	N	N	M	N	N N	8	1.9	
79	Floodplain Forest	Alluvial Shrub Swamp	M	Part of large shrubby wetland along Browns River, needs field verification	N	Υ	Limerick	N	M	M	L	L	N	N	M	N	N N	8	2.3	
80	Floodplain Forest	Alluvial Shrub Swamp	L	Part of large shrubby wetland along Browns River, needs field verification	N	N	NA	N	M	M	L	L	N	N	М	N	N N	8	1.0	

Wetland	D Natural Community	Natural Community 2	Confidence	Comments	VSWI	HYDRIC	HYDRICTYPE	VP HABITAT	FLOOD WATER	WTR QUALITY		_	EXEMPLR NC	RTE	CTL		ECON		FXN-VAL SUM	ACRES	CONSERVED
81	Alder/Willow Swamp	-	С	Small willow swamp along drainage	Υ	N	NA	N	L	L	L	N	N	N	L	L	N	N	5	0.5	
82	Seep		L	Boundaries uncertain	N	N	NA	N	N	L	M	N	N	N	N	N	N	N	3	0.1	
83 84	Shallow Emergent Marsh Alder/Willow Swamp	Alder/Willow Swamp Shallow Emergent Marsh	C C	Nice wetland along drainage, may contain open water Nice little wetland along drainage	Y	Y	Peachum Peachum	M	L	L	Ļ	N N	N	N N	L	N	N N	N N	4 5	2.6 1.5	
85	Seep	Shallow Emergent Marsh	M	Along small stream	N	N	NA	N	N	Ī	М	N	N	N	N	N	N	N	3	0.2	
86	Alder/Willow Swamp	Old Field	***	Wettest part of this wetland area, some open water in spring	Y	Y	Cabot	Ľ	N	N	L	N	N	N	N	N	N	N	1	0.8	
87	Old Field		L	Looks only marginally wet in photos	Υ	Υ	Cabot	N	N	N	L	N	N	N	N	N	N	N	1	6.5	
88	Old Field		L	Looks only marginally wet	N	Υ	Enosburg	N	N	N	L	N	N	N	N	N	N	N	1	3.6	
89	Old Field		L M	Sloping field, looks only marginally wet	N	N	NA	N	N	N	N	N N	N N	N N	N	N	N	N	0	3.0	
90 91	Old Field Shallow Emergent Marsh	Agricultural Field		Sloping field above drainage Drainage through field, looks fairly wet, boundaries uncertain	N Y	N V	NA Limerick	N N	N M	N M	M	IN I	N N	N N	IN I	IN I	N N	N N	9	3.9 7.3	
92	Old Field	Agricultural Field	M	Upland and wetland areas mixed	Ý	N	NA	N	N	N	L	N	N	N	N	N	N	N	1	5.8	
93	Old Field		M	Looks like marginally wet area on field edge	N	Υ	Cabot	N	N	N	N	N	N	N	N	N	N	N	0	0.5	
94	Pond		Н	Man-made	Υ	Υ	Cabot	N	N	N	L	L	N	N	N	N	L	N	3	0.9	
95	Pond			Man-made	Y	N	NA O. I	N	N	N	L	Ļ.	N	N	N	N	L.	N	3	0.2	
96 97	Pond	Shallow Emergent March	H H	Man-made On edge of conifer awarms and field	Y	Y	Cabot	N	N	N M	L	L	N	N N	N	N N	L N	N	3	0.3 1.3	
98	Alder/Willow Swamp Northern White Cedar Swamp	Shallow Emergent Marsh	H	On edge of conifer swamp and field  Nice looking forested swamp, typed by J.Mohr	Y	Y	Muck Muck	L	N.	IVI	M	N	IN I	N	į.	IN I	N N	N	6	15.7	
99	Shallow Emergent Marsh		н	Along drainage on edge of swamp	N	Ϋ́	Muck	N	Ľ	M	L	ï	N	N	Ĺ	N	N	N	6	0.8	
100	Alder/Willow Swamp		Н	Scattered conifers over shrubs	Υ	Υ	Limerick	L	N	L	L	N	N	N	N	L	N	N	3	7.2	
101	Spruce-Fir-Tamarack Swamp		M	Mixture of hardwood and conifers	N	Υ	Limerick	N	L	L	M	L	L	N	L	L	N	N	8	11.6	
102	Shallow Emergent Marsh	Rivershore Grassland	L	Wetland or upland clearing along river	N	N	NA	N	L	М	L	N	N	N	M	N	N	N	6	2.0	
103	Alder/Willow Swamp	Shallow Emergent Marsh	H M	Includes open water, old oxbow, looks like nice, high functioning wetland	Y	Y	Limerick	Н	М	М	H	M N	N	N N	L	N	N	N	10 4	2.9	
104 105	Alder/Willow Swamp Alder/Willow Swamp	Alluvial Shrub Swamp Old Field	M	Shrubby area adjacent to river and swamp Narrow band of shrubby vegetation along stream	N N	IN NI	NA NA	N N	L	L M	L	IN I	N N	N N	L	IN I	N N	N N	7	1.3 8.7	
106	Old Field	Alder/Willow Swamp	L	Shrubs along drainage through field	N	Y	Limerick	N	Ĺ	L	Ĺ	Ĺ	N	N	Ĺ	N	N	N	5	0.4	
107	Old Field	/ lidely friment entamp	M	Wetland vegetation along drainage through field	Y	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.8	
108	Alder/Willow Swamp	Old Field	L	Shrubs along stream, may not be wet, needs verification	N	N	NA	N	L	L	L	L	N	N	M	N	N	N	6	3.2	
109	Agricultural Field		L	Agricultural field that looks marginally wet, boundaries uncertain	N	Υ	Limerick	N	N	N	Ν	N	N	N	N	N	N	N	0	2.0	
110	Shallow Emergent Marsh	Alder/Willow Swamp	Н	Open wetland along stream, may be beaver influenced	Y	N	NA	Ļ	M	M	M	L	N	N	M	L	N	N	10 9		Public, Part
111 112	Beaver Wetland Beaver Wetland	Emergent Marsh, Alder/Willow Swamp Emergent Marsh, Alder/Willow Swamp	H H	Small beaver flooding, marsh, shrub swamp or pond, inlcudes open water Small beaver wetland, inlcudes open water	Y	Y N	Munson NA	L	M	М	M M	L	N N	N N	M M	N N	N	N	9 8	3.1 0.3	
113	Pond	Emergent Marsh, Alder/Willow Swamp		Man-made	N N	N	NA NA	N	N N	N	IVI	ī	N	N	N	N N	IN I	N	3	0.5	
114	Pond		H	Man-made	Y	N	NA	N	N	N	Ĺ	Ĺ	N	N	N	N	Ĺ	N	3	0.6	
115	Old Field	Alder/Willow Swamp	Н	Sloping old field or shrub swamp	Υ	Υ	Limerick	N	N	L	L	N	N	N	N	N	N	N	2	3.7	
116	Pond			Man-made	Υ	N	NA	N	N	N	L	L	N	N	N	N	L	N	3	0.2	
117	Old Field	Alder/Willow Swamp	M	Doesn't look wet in photos, but VSWI, needs verification	Y	Y	Scarboro	N	N	N	L	N	N	N	N	N	N	N	1	1.8	
118	Beaver Wetland Shallow Emergent Marsh	Emergent Marsh, Alder/Willow Swamp	H C	Nice looking beaver wetland along stream, inloudes open water	Y	N	NA Scarboro	L	М	L	М	L	N N	N N	M M	L	N	N	9	1.3 3.9	
119 120	Alder/Willow Swamp		C	Reed Canary grass dominated marsh along drainage Nice looking alder swamp along stream, dense alder	Y	Y	Scarboro	N	Ī	i i	ī	ī	N N	N	IVI	L	N N	N	6	2.1	
121	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp		Beaver pond with wetland margin, includes open water	Ϋ́	Ϋ́	Cabot	M	Ĺ	M	M	M	N	N	Ĺ	N	N	N	8	2.6	
122	Shallow Emergent Marsh	,	Н	Large marsh	Υ	Υ	Cabot	L	М	M	Н	M	L	N	M	L	N	N	13	8.5	
123	Deep Broadleaf Marsh		Н	Typed by J.Mohr	Υ	Υ	Cabot	M	M	M	Н	M	L	N	M	L	N	N	13	2.6	
124	Deep Broadleaf Marsh	0.1.5	Н	Typed by J.Mohr	Y	Y	Cabot	М	М	М	Н	M	L	N	М	L	N	N	13	0.1	
125	Agricultural Field	Old Field	М	Wet agricultural field, some shrubs	Y N	N N	NA NA	N N	N N	N N	N N	N N	N N	N N	N N	N	N	N	0	3.9 0.5	
126 127	Agricultural Field Agricultural Field		M	Looks wettest near road Wet field above marsh	N N	N Y	Cabot	N N	N N	N N	N	N N	N N	N N	N N	N N	N N	N N	0	1.0	
128	Agricultural Field		M	Looks only marginally wet from road, scattered rushes	N N	Ϋ́	Peachum	N	N	N	N	N	N	N	N	N	N	N	0	2.0	
129	Old Field	Alder/Willow Swamp	Н	Wet, sloping shrubby field above marsh	Υ	Υ	Cabot	N	N	L	L	N	N	N	N	L	N	N	3	14.7	
130	Agricultural Field		L	Sloping field, looks only marginally wet	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	2.4	
131	Old Field	Agricultural Field	L	Looks like small wet area in old field	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.2	
132	Agricultural Field		C H	Low area in pasture that collects water  Man-made	Y	N	NA Basahum	N N	N N	N N	N	N	N N	N N	N N	N N	N N	N N	0 2	0.2 0.5	
133 134	Pond Red Maple-Black Ash Swamp		C	Small hardwood or shrub swamp, boundaries uncertain	Y	Y	Peachum Muck	IN I	N N	IN I	L I	L N	IN I	N N	N N	N N	N N	N	3	1.7	
135	Shallow Emergent Marsh	Alder/Willow Swamp	Č	May includes areas of open water, Alder along northern edge	Y	N	NA	Ĺ	N	Ĺ	Ĺ	N	N	N	N	N	N	N	2	1.0	
136	Vernal Pool	Seep	M	Vernal Pool or seep near town boundary	N	N	NA	M	N	N	М	N	L	N	N	N	N	N	3	0.2	
137	Seep		M	Looks like seep in mixed forest	N	N	NA	N	N	L	М	N	N	N	N	N	N	N	3	0.6	
138	Seep	V 15 1	L	Smaller and less confident seep than one to east	N	N	NA	N	N	N	М	N	N	N	N	N	N	N	2	0.2	
139 140	Seep Seep	Vernal Pool	M M	Small seep or pool Small seep in mixed forest	N N	N	NA NA	L N	N N	N N	M M	N N	N	N N	N N	N	N N	N	2	0.1 0.4	
141	Pond			Man-made	N Y	N	NA NA	N	N N	N	IVI	IN I	N N	N	N N	N N	N	N	2	0.4	
142	Seep	Alder/Willow Swamp	M	Looks like a small wetland in mixed forest, boundaries uncertain	N	N	NA	N	N	Ĺ	M	N	N	N	N	N	N	N	3	0.3	
143	Vernal Pool	·	L	Small potential vernal pool	N	N	NA	Н	N	N	M	N	L	N	N	N	N	N	3	0.0	
144	Shallow Emergent Marsh			May include areas of open water, Cattails and willow	N	Υ	Cabot	N	N	L	L	N	N	N	N	N	N	N	2	0.7	
145	Shallow Emergent Marsh	Beaver Wetland		May be beaver influenced	Y	Y	Muck	L	L	M	М	M	N	N	L	N	N	N	8	2.0	
146	Old Field	Alder AACH Correspond	M M	Along drainage, boundaries uncertain	Y	Y	Cabot	N	L	L	L	L	N	N	L	N	N	N	5	0.9	
147 148	Old Field Pond	Alder/Willow Swamp	***	Drainage ditch on east site, surrounded by field  Man-made	N N	N N	NA NA	N N	N N	L N	L	N	N N	N N	N N	IN N	IN I	N N	3	0.7 0.1	
149	Pond		H	Along drainage in field	N	Y	Cabot	N	L	L	Ĺ	Ĺ	N	N	N	N	N	N	4	0.1	
150	Pond		н	Man-mad	N	Ϋ́	Cabot	N	N	Ĺ	М	Ĺ	N	N	N	N	N	N	4	0.4	
151	Agricultural Field			Wet agricultural field, boundaries uncertain	Υ	Υ	Cabot	N	Ν	N	Ν	N	N	N	N	N	N	N	0	0.4	
152	Agricultural Field		M	Looks like wet field, boundaries uncertain	Υ	N	NA	N	N	N	Ν	N	N	N	N	N	N	N	0	8.0	
153	Agricultural Field	ALL ANTIL O		Wet sloping field, boundaries uncertain	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.3	
154	Red Maple-Black Ash Swamp	Alder/Willow Swamp	C M	Mixed herbaceous and woody vegetation, some dying trees	N	Y	Muck	L	N	L	L	N	L	N N	N N	L	N	N	4 2	2.6	
155 156	Pond Agricultural Field			Man-made Wet area in field above drainage	N N	Ť Y	Cabot Scantic	N N	N N	N N	L N	L N	N N	N N	N N	IN NI	IN N	N N	0	0.1 0.3	
157	Agricultural Field			May include shrubs, needs field verification	N	Ϋ́	Cabot	N	N	N	N	N	N	N	N	N	N	N	0	0.3	
158	Hemlock-Fir-Ash Seepage Swamp	Spruce-Fir-Tamarack Swamp	H	Nice looking swamp, eastern boundaries uncertain	Y	Ϋ́	Scantic	L	L	Ĺ	М	ï	М	N	Ĺ	N	N	N	8	6.4	
159	Agricultural Field	·	M	Small drainage in field	N	Υ	Cabot	N	Ν	N	Ν	N	N	N	N	N	N	N	0	0.1	
160	Old Field		1	Soils mapped as muck, but doesn't look wet in photo? needs verification	N	Υ	Muck	N	N	N	1	N	N	N	N	N	N	N	1	0.9	

Wetland II	Natural Community	Natural Community 2	Confidence	Comments	VSWI	HYDRIC	HYDRICTYPE	VP HABITAT	FLOOI		WILD LIFE	FISH- ERIES	EXEMPLRY NC	RTE		N AESTH	REC I		FXN-VAL SUM	ACRES	CONSERVED
161	Agricultural Field	Natural Community 2	L	Looks only marginally wet	N	Y	Enosburg	N	N	N	N	N	N	N	N	N	N	N	0	3.6	CONCENTED
162	Pond		H	Man-made	Y	N	NA	N	L	Ĺ	М	М	N	N	N	Ĺ	Ĺ	N	8	5.5	
163	Shallow Emergent Marsh		C	Nice wetland along drainage, includes open water	N	N	. NA	N	L	M	L	L	N	N	L	L	N	N	7	1.0	
164 165	Shallow Emergent Marsh Alder/Willow Swamp	Alder/Willow Swamp	Н	Part of large wetland, grades into shrub swamp Part of large wetland, grades into marsh and swamp	Y	Y	Limerick Scarboro and Limerick	M M	L H	L M	L M	N N	N N	N N	N N	L	N N	N	4	1.0 6.2	
166	Shallow Emergent Marsh	Alder/Willow Swamp	Н	Part of large wetland, includes areas of open water, looks nice	Y	Y	Scarboro and Limerick	M	M	M	M	I	N N	N	IN I	į.	N	N	9	4.7	
167	Alder/Willow Swamp	/ was / which strainp	C	Part of large wetland; nice looking swamp, dense alder	Ϋ́	Ϋ́	Scantic	L	H	M	М	Ĺ	N	N	H	Ĺ	N	N	12	1.6	
168	Alder/Willow Swamp		Н	Part of large wetland, grades into marsh	Υ	Υ	Scantic	L	М	M	М	N	N	Ν	L	L	N	N	8	0.6	
169	Alder/Willow Swamp	Spruce-Fir-Tamarack Swamp	H	Part of large wetland, grades into forested swamp	Y	Y	Limerick	L	N	L	М	N	L	N	N	L	N	N	5	2.4	
170 171	Spruce-Fir-Tamarack Swamp Red Maple-Black Ash Swamp	Hemlock-Fir-Ash Seepage Swamp Alder/Willow Swamp	H H	Nice looking forested swamp Part of large wetland, may be part of conifer swamp	Y	Y	Limerick Limerick	M	L N	L	M	N N	L	N N	N N	L N	N N	N N	6 3	14.1 1.9	
171	Alder/Willow Swamp	Shallow Emergent Marsh	Н	Part of large wetland, includes open water	Y	N.	NA	M	H	M	М	M	N	N	H	IN I	N	N	13	3.6	
173	Spruce-Fir-Tamarack Swamp	Alder/Willow Swamp	н	Eastern extension of larger swamp to west, may be shrubby	Ϋ́	N	NA	L	Ĺ	L.	М	N	Ĺ	N	L	Ĺ	N	N	7	4.3	
174	Old Field	·	L	Adjacent to large wetland, but may not be wet	N	N	NA	N	N	L	L	N	N	Ν	N	L	N	N	3	1.1	
175	Floodplain Forest	Alder/Willow Swamp	M	Forested wetland along river, type unknown	Υ	N	NA	N	M	М	М	L	N	Ν	Н	L	N	N	11	8.0	
176	Shallow Emergent Marsh		H M	Old oxbow, nice looking wetland	Y	Y	Limerick	H	M N	H N	H N	M N	N N	N	L N	L	N N	N	12 0	2.5 3.8	
177 178	Agricultural Field Old Field		C	Looks marginally wet, rest of field though mapped looks drier Looks wet from road, extent uncertain	r N	Y N	Limerick NA	N N	N N	N N	N	N N	N N	N	IN I	N N	N N	N N	1	0.5	
179	Floodplain Forest	Old Field	M	Riverbank area, may be early successional	Ϋ́	Y	Limerick	N	M	M	Ĺ	Ĺ	N	N	H	N	N	N	9	3.3	
180	Agricultural Field		M	Low area in field	Υ	Υ	Limerick	N	N	N	Ν	N	N	Ν	N	N	N	N	0	1.5	
181	Agricultural Field		M	Includes drainage and rivershore area	Υ	Υ	Limerick	N	N	N	N	N	N	Ν	N	N	N	N	0	0.3	
182	Agricultural Field	Old Field	M	Wet agricultural field, includes multiple drainages	Y	Y	Limerick	N	N	N	N	N	N	N	N	N	N	N	0	23.2	
183 184	Old Field Shallow Emergent Marsh	Alder/Willow Swamp	H H	Includes areas of marsh, early successional Old oxbow, looks like nice wetland	Y	Y	Limerick Limerick	N	L M	L M	H	N M	N N	N N	N	N N	N N	N N	3 10	4.4 1.3	
185	Alder/Willow Swamp	Floodplain Forest	Н	Floodplain position, may be early successional	Y	Y	Limerick	П N	M	M	ı	I	N N	N	H	N N	N	N	9	12.9	
186	Floodplain Forest	Alder/Willow Swamp	M	May be early successional	N	Ý	Limerick	N	M	M	Ĺ	Ĺ	N	N	Н.	N	N	N	9	1.4	
187	Red Maple-Black Ash Swamp	Alder/Willow Swamp	L	May not be wet, needs verification	N	N	NA	N	L	L	L	L	L	N	M	N	N	N	7	2.0	
188	Hemlock-Fir-Ash Seepage Swamp		Н	Ranked and typed by J.Mohr	Υ	Υ	Muck and Limerick	L	N	L	M	N	Н	N	N	N	N	N	6	49.7	
189	Agricultural Field		L	Low, wet pasture; extent uncertain	N	Y	Enosburg	N	N	N	N	N	N	N	N	N	N	N	0	1.4	
190 191	Agricultural Field Agricultural Field		C M	Wet agricultural field Low wet area in field	N N	Y	Enosburg Enosburg	N	N N	N N	N N	N N	N N	N N	N N	N	N N	N	0	2.4 0.3	
192	Floodplain Forest	Alluvial Shrub Swamp	M	May be early successional	N N	N.	NA	N N	M	M	IN I	L	N N	N	H	N N	N	N	9	3.0	
193	Floodplain Forest	Alluvial Shrub Swamp	M	May be early successional	N	N	NA NA	N	L	L.	Ĺ	Ĺ	N	N	Ľ	N	N	N	5	0.6	
194	Pond	•	Н	Man-made	N	N	NA	N	N	N	L	L	N	N	N	N	N	N	2	0.2	
195	Floodplain Forest		L	May not be wet, needs verification	N	Υ	Limerick	N	M	L	L	L	N	N	Н	L	N	N	9	4.8	
196	Red Maple-Black Ash Swamp	Spruce-Fir-Tamarack Swamp	L	Can't tell if wetland, needs verification, boundaries uncertain	Y	Y	Limerick	N	L	L	L	N	L	N	N	L	N	N	5	1.7	
197 198	Agricultural Field Old Field	Northern Hardwood Seepage Forest	M L	Boundaries uncertain, may extend both north and west Type unknown, looks slightly wet in photos?	Y N	Y	Limerick Cabot	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	N N	0	1.1 0.8	
199	Floodplain Forest	Alluvial Shrub Swamp	H	Along stream, may be early successional	Y	Ϋ́	Limerick	N	M	L	L	L	N	N	M	L	N	N	8	4.1	
200	Alluvial Shrub Swamp		M	Early successional, may not be wet	N	Y	Limerick	N	М	M	Ĺ	L	N	N	М	L	N	N	9	4.1	
201	Shallow Emergent Marsh		С	Large, nice looking open marsh along stream	Y	Υ	Limerick	N	M	M	M	L	N	Ν	Н	M	N	N	12	5.9	
202	Agricultural Field	Shallow Emergent Marsh	M	Wet field	Y	Υ	Scantic	N	N	N	N	N	N	N	N	N	N	N	0	2.8	
203	Old Field	Alder/Willow Swamp	C M	Wet field, partially mowed, reed canary grass/scattered alder	Y	Y	Livingston	N	N N	L N	L N	N N	N N	N N	N N	L N	N N	N	3 0	6.7 1.0	
204 205	Agricultural Field Pond	Shallow Emergent Marsh	C	Wet field  Man-made, half covered with aquatic plants	Y	Y	Livingston Limerick	N N	N N	N N	M	I	N N	N	N	N N	N	N	3	0.3	
206	Shallow Emergent Marsh		Č	Large, nice looking wetland	Ý	Ý	Limerick	N	M	M	M	Ĺ	N	N	H	M	N	N	12	13.4	
207	Alder/Willow Swamp		С	Large, nice looking shrub swamp	Υ	Υ	Cabot	L	М	M	М	L	N	Ν	M	L	N	N	10	18.5	
208	Northern Hardwood Seepage Forest		L	May not be wet, needs verification	N	N	NA	N	N	N	L	N	N	N	N	N	N	N	1	1.0	
209	Red Maple-Black Ash Swamp		Н	Looks like nice swamp along stream, southern bounds uncertain	Y	Y	Cabot	L	L N	L	L	N	L	N	L	N	N	N	5	5.6	
210 211	Old Field Alder/Willow Swamp		M M	Shrubby, wet old field Wetland associated with old pit or guarry	N	Y N	Enosburg NA	N	IN N	N N	L	N N	N N	N N	N N	L N	N N	L N	3	2.3 1.8	Public, Entire
212	Pond		H	Man-made	N	N	NA NA	N	N	N	Ĺ	L	N	N	N	L	Ĺ	N	4	0.1	Tublic, Little
213	Shallow Emergent Marsh	Alder/Willow Swamp	C	Mixed shrub and herb vegetation	N	N	NA	N	N	N	Ĺ	N	N	N	N	L	N	N	2	0.8	
214	Alder/Willow Swamp		M	Looks like shruby area along stream, needs verification	N	N	NA	N	М	L	М	L	N	Ν	M	L	N	N	9	1.5	
215	Pond	Vernal Pool	Н	Old pond, looks partially vegetated	Y	Y	Peachum	L	N	N	М	L	N	N	N	N	N	N	3	0.1	
216 217	Old Field Shallow Emergent Marsh		M M	Old field by pond, may be wetland  Wetland along drainage, looks only marginally wet from road	N Y	Y	Peachum Limerick	N N	N	IN I	L	N L	N N	N	N M	N	N N	N N	7	1.2 3.8	
218	Old Field	Agricultural Field	I	Drainage through field	N	N	NA	N	N	Ī	ī	N	N	N	N	N	N	N	2	0.8	
219	Old Field	Alder/Willow Swamp	M	Needs verification, boundaries uncertain	N	Υ	Muck	N	N	N	Ĺ	N	N	N	N	L	N	N	2	3.4	
220	Old Field	Lowland Spruce-Fir Forest	L	Looks only marginally wet, needs verification	N	Υ	Cabot	N	N	L	L	N	N	Ν	N	N	N	N	2	3.3	
221	Pond		Н	Man-made	Y	N	NA	N	N	N	М	L	N	N	N	N	L	N	4	0.2	
222	Pond		H H	Man-made Man-made	N N	N	NA NA	N	N N	N	М	L	N	N N	N N	N	L	N	4	0.2 0.0	
223 224	Pond Old Field	Alder/Willow Swamp	M	Small wetland between ponds	N N	Y	Muck	N N	N N	IN I	L	N	N N	N	N N	IN I	N	N	3	0.0	
225	Pond	Deep Broadleaf Marsh	H.	Man-made pond, may be filling in to marsh	N N	N	NA	N	N	N	Ĺ	Ĺ	N	N	N	Ĺ	N	N	3	0.1	
226	Red Maple-Black Ash Swamp	Alder/Willow Swamp	С	Boundary and extent uncertain	Υ	Υ	Cabot	N	N	L	L	N	L	N	N	L	N	N	4	2.6	
227	Northern Hardwood Seepage Forest		L	Doesn't look wet from road, needs confirmation	Υ	Υ	Cabot	N	N	N	L	N	N	Ν	N	L	N	N	2	1.6	
228	Pond	OLLE: II	С	Man-made	Y	N	NA .	N	L	L	М	L	N	N	N	N	L	N	6	0.2	
229	Alder/Willow Swamp	Old Field	M M	Shrubby wetland vegetation along stream Sloping wet field, looks only marginally wet from road	Y N	Y	Cabot NA	N N	M	M N	M N	L N	N N	N	M N	L	N	N N	10 0	6.4 0.6	
230 231	Old Field Old Field		M	Drains into wetland to south, may be Poor Fen (J.Mohr)	N Y	N Y	NA Muck	N N	IN N	IN N	IN I	N N	IN N	N N	N N	N N	N N	N N	1	0.6 2.9	
232	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	C	Nice looking beaver wetland, includes open water	Ϋ́	Ϋ́	Muck	M	L	L	Н	M	N	N	M	L	N	N	10	8.0	
233	Old Field	Agricultural Field	M	Looks like wet drainage through field	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.2	
234	Old Field		L	Marginally wet old field above beaver wetland	N	Υ	Cabot	N	N	N	Ν	N	N	Ν	N	N	N	N	0	0.5	
235	Pond		H	Man-made	N	N	NA	L	N	N	L	L	N	N	N	N	L	N	3	0.1	
236	Old Field		L	Sloping field, may not be wet	N	N	NA NA	N	N N	N	N	N	N N	N	N	N	N	N	0	0.4	
237 238	Pond Alder/Willow Swamp	Red Maple-Black Ash Seepage Swamp	H M	Man-made Small swamp at base of slope	N N	N Y	NA Muck	N N	N N	N N	L	L N	N N	N N	N N	N N	L N	IN N	3 1	0.1 1.4	
239	Northern Hardwood Seepage Forest		C	Looks marginally wet; Aspen, sensitive fern etc.	N N	Ý	Cabot	N	N	N	Ĺ	N	N	N	N	L	N	N	2	0.8	
240	Pond		H	Man-made	N	N	NA	N	N	N	L	L	N	N	N	N	L	N	3	0.1	

etland ID	Natural Community	Natural Community 2	Confidence	e Comments	vswi	HYDRIC	HYDRICTYPE	VP HABITAT	FLOOI WATE			_	NC NC	Y RTE	EROSIOI CTL	_	REC E		SUM	ACRES	CONSERVED
241	Seep	Northern Hardwood Seepage Forest	L	Needs field verification	N	Υ	Cabot	N	N	L	М	L	N	N	N	N	N	N	4	0.6	
242	Seep		L	Along stream in forest	N	N	NA O L	N	L	L	М	L	N	N N	L N	N	N	N	6	0.2	
243 244	Old Field Agricultural Field		M M	Sloping old field, wettest in west Field with drainage	N N	Y N	Cabot NA	N N	N N	N N	N	N N	N N	N N	IN N	N N	N N	N N	0	5.1 0.7	
245	Shallow Emergent Marsh		C	Wet field along drainage, dominated by reed canary grass	N	N	NA NA	N	Ĺ	Ĺ	L	Ĺ	N	N	Ĺ	L	N	N	6	1.2	
246	Pond		H	Man-made	N	Υ	Cabot	N	N	N	L	L	N	N	N	N	L	N	3	0.1	
247	Shallow Emergent Marsh	Alder/Willow Swamp	С	Small marsh on edge of field; cattails and alder	N	N	NA	N	N	L	L	N	N	N	N	N	N	N	2	1.1	
248	Pond		Н	Man-made	Υ	N	NA	N	N	N	L	L	N	N	N	N	L	N	3	0.7	Public, Entire
249	Old Field	Agricultural Field	M	Sloping field, looks marginally wet, boundaries uncertain	N Y	Y	Munson	N M	N M	N M	L	N	N N	N N	N	N	N N	N	1	1.5	Public, Entire
250 251	Floodplain Forest Floodplain Forest	Alluvial Shrub Swamp Alluvial Shrub Swamp	H H	Nice mix of floodplain communities, include open water Mix of floodplain communities	Y	N N	NA NA	IVI I	IVI I	M	L	L	N N	N N	H	IVI I	N N	N L	11 10	5.7 4.5	Public, Part Public, Part
252	Old Field	Alluviai Siliub Swariip	M	Margin of field, needs verification	N N	Y	Enosburg	N	N	N	Ī	N	N	N	N	N	N	i	2	0.3	r ublic, r art
253	Pond		H	Man-made	Y	N.	NA	N	N	N	Ē	Ĺ	N	N	N	N	È	N	3	0.4	
254	Spruce-Fir-Tamarack Swamp		M	Small potential conifer swamp	N	N	NA	N	N	N	M	N	Ĺ	N	N	N	N	N	3	0.7	Public, Entire
255	Alder/Willow Swamp	Floodplain Forest	Н	Nice looking wetland along Lee	Υ	N	NA	M	Н	L	L	L	L	N	Н	N	N	N	10	44.9	Public, Entire
256	Shallow Emergent Marsh	Pond	M	Pond or small roadside marsh	N	N	NA	M	N	N	L	N	N	N	N	L	N	N	2	0.2	Public, Entire
257	Alder/Willow Swamp	Red Maple-Black Ash Seepage Swamp	M	Includes some open water, at base of slope along Lee	N	N	NA	L	L	L	L	N	N	N	N	N	N	N	3	5.6	Public, Entire
	Old Field		M	May be early successional	N	N	NA	N	N	N	L	N	N	N	N	N	N	N	1	2.9	Public, Entire
259	Alluvial Shrub Swamp	Floodplain Forest	H M	May be early successional	Y	N	NA	N N	М	L	L	L N	N N	N N	M M	N	N	N	7 6	6.0	Public, Entire
260 261	Old Field Alder/Willow Swamp	Alluvial Shrub Swamp Floodplain Forest	H	May be part of floodplain, needs verification	Y N	IN V	NA Limerick	M	M	L	M	IN I	IN NI	N	H	M	N N	N	11	5.7 9.9	Public, Entire Public, Entire
262	Alluvial Shrub Swamp	Floodplain Forest	Н	Nice floodplain type, includes open water Nice looking floodplain type	N N	I N	NA	N	M	L	IVI	L	N	N		M	N	N	10	3.9	Public, Entire
263	Alder/Willow Swamp	Floodplain Forest	H	Nice looking floodplain type  Nice looking floodplain type	N	N	NA NA	N	M	ī	Ī	Ī	N	N	H	M	N	N	10	5.5	Public, Entire
264	Alluvial Shrub Swamp	1 loodplain 1 orest	Ë	Small part of larger floodplain wetland	N N	N	NA	N	L.	ī	Ē	N	N	N	N	L	N	N	4	0.2	Public, Entire
265	Floodplain Forest		H	Floodplain type, mixed with conifers, may be early successional	Y	N	NA	N	M	Ĺ	M	Ĺ	N	N	Н	M	N	N	11	7.4	Public, Part
266	Floodplain Forest		L	Looks fairly wet in photos, but can't tell from road, needs verification	Υ	Υ	Limerick	N	M	L	L	L	N	N	M	L	N	N	8	3.9	
267	Red Maple-Black Ash Swamp		M	Looks only marginally wet, formally part of swamp across road	Υ	N	NA	N	N	N	L	N	L	N	N	N	N	N	2	1.5	
268	Poor Fen		Н	Looks like floating peat mat	N	N	NA	L	N	N	L	N	Н	L	N	N	N	N	5	0.7	
269	Seep	Vernal Pool	M	Small potential wetland in mixed forest	N	N	NA	L	N	L	M	N	N	N	N	N	N	N	3	0.1	
270	Old Field	Alder/Willow Swamp	М	Shrubby wetland at base of slope	N	Y	Scarboro	N	N	L	М	N	N	N	N	N	N	L	4	2.0	
271	Old Field		M	Field and patch of woods that appears wet in photos	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.3	
272 273	Pond Spruce-Fir-Tamarack Swamp	Red Maple-Black Ash Seepage Swamp	H M	Man-made	Y	N	NA Boochum	N	N	N N	L	L N	N	N	IN N	IN N	L N	N	3 3	0.1 2.0	
273 274	Pond	Hed Maple-Black ASH Seepage Swamp	M	Narrow potential wetland at base of slope Man-made	N N	N N	Peachum NA	L N	N N	N N	L	IN I	N	N	N N	N N	IN I	N N	3	0.0	
275	Pond		H	Man-made	Y	N	NA NA	N	N	N	ī	ī	N	N	N	N	ī	N	3	0.1	
276	Old Field	Alder/Willow Swamp	H	May contain open water	Ϋ́	N	NA	N	N	N	Ĺ	N	N	N	N	N	N	N	1	0.4	
277	Seep		M	Boundaries uncertain	N	N	NA	N	N	Ĺ	M	N	N	N	N	N	N	N	3	0.2	Public, Entire
278	Beaver Wetland	Alder/Willow Swamp	С	Southern end of large beaver wetland	Υ	Υ	Peachum and Cabot	M	L	L	L	L	N	N	M	N	N	N	6	1.1	
279	Shallow Emergent Marsh	Old Field	M	Northern end of drainage	N	Υ	Cabot	N	L	L	L	L	N	N	L	L	N	N	6	0.2	
280	Old Field		С	Sloping field, along drainage; early successional	Υ	Υ	Cabot	N	N	N	L	N	N	N	L	N	N	N	2	4.2	
281	Pond		Н	Man-made	Υ	N	NA	N	N	N	L	L	N	N	N	N	L	N	3	0.4	Public, Part
282	Shallow Emergent Marsh	Old Field	С	Along drainage	N	N	NA	N	M	М	L	L	N	N	M	L	N	N	9	2.7	Public, Entire
283	Shallow Emergent Marsh	Beaver Wetland	Н	Looks fairly wet, includes open water	N	N	NA	L	M	L	М	L	N	N	М	N	N	N	8	1.5	Public, Entire
284 285	Agricultural Field		M C	Boundaries uncertain	N N	Y N	Limerick NA	N N	N	N N	N N	N N	N N	N N	N N	N N	N	N	0	0.6 1.2	
286	Old Field Agricultural Field		M	May include open water in spring SMall wet area in agricultural field	N N	N N	NA NA	N	N N	N	N	N	N	N	N	N N	N	N	0	0.3	
287	Pond		H	Man-made	Y	N	NA NA	N	N	N	M	Ï	N	N	N	N	ï	N	4	0.5	
288	Pond		H	Man-made	Ϋ́	N	NA	N	N	N	L	Ĺ	N	N	N	N	Ĺ	N	3	0.1	
289	Agricultural Field		M	Small drainage through field	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.5	
290	Shallow Emergent Marsh	Old Field	M	Wet area along drainage through field	N	Υ	Cabot	N	L	M	L	L	N	N	L	N	N	N	6	1.5	
291	Old Field	Alder/Willow Swamp	M	Wet area along road and drainage	N	Υ	Cabot	N	L	L	L	N	N	N	L	L	N	N	5	1.2	
292	Alder/Willow Swamp		C	Dense alder shrubs along stream	Υ	Υ	Cabot	N	L	L	L	N	N	N	M	L	N	N	6	2.2	
293	Alder/Willow Swamp		C	Dense alders along stream	Y	Y	Cabot	N	L	L	L	N	N	N	M	L	N	N	6	0.5	
294	Old Field	Francisco Maria la Alda (ANSII a con Occasiona	L	Unsure if wetland, shrubby, sloping field above beaver wetland	Y	Y	Cabot	N	N	M M	L H	N M	N	N	N	M	N	N	5	2.6	
295 296	Beaver Wetland Pond	Emergent Marsh, Alder/Willow Swamp	H H	Large and significant wetland, inlcudes open water  Man-made, on edge of wetland	Y	Y	Cabot Muck	M	N	N N		IVI	N	N N	N	М	N N	N N	11 3	21.2 0.1	
297	Red Maple-Black Ash Swamp	Shallow Emergent Marsh	C	Large, nice looking swamp; mixed type	Ý	Ý	Muck	Ĺ	M	M	M	N	IN I	N	I	M	N	N	10	5.7	
	Agricultural Field	Onallow Emergent Warsh	M	Small wet area in field	N	N.	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.2	
299	Shallow Emergent Marsh		C	Nice natural weltand	N	N	NA	N	N	N	ï	N	N	N	N	ï	N	N	2	0.7	
300	Pond		Н	Man-made	Υ	Υ	Cabot	N	N	N	L	L	N	N	N	N	L	N	3	0.4	
301	Pond		Н	Man-made	N	N	NA	N	N	N	L	L	N	N	N	N	L	N	3	0.1	
302	Red Maple-Black Ash Swamp	Shallow Emergent Marsh	M	Looks like small hardwood swamp or marsh, boundaries uncertain	N	N	NA	L	N	N	L	N	L	N	N	N	N	N	2	0.9	
303	Alder/Willow Swamp		С	Large, nice looking swamp; potential poor fen (J.Mohr)	Υ	Υ	Muck	L	N	L	M	N	N	N	N	L	N	N	4	5.4	
304	Pond		Н	Man-made	N	Υ	Cabot	N	N	N	L	L	N	N	N	N	L	N	3	0.1	
305	Alder/Willow Swamp		L	Needs verification	N	Y	Cabot	N	N	N	L	N	N	N	N	L	N	N	2	0.3	
306	Agricultural Field	Old Field	L	Needs field verification	N	N	NA	N	N	N	N M	N	N	N N	N	N	N	N	0	2.1	
307	Vernal Pool	Seep	M M	Seep or vernal pool on small summit	N V	N	NA Cabat	H N	IN N	N	M	N N	IN I	N N	IN N	N	N	IN N	2 4	0.1 32.6	Dublic Entire
308 309	Seep	Red Maple-Black Ash Seepage Swamp	M	Large sloping forest, looks marginally wet, boundaries uncertain In saddle at headwaters of small stream	r N	Y N	Cabot NA	N N	N N	L I	M	IN I	L N	N	N N	N N	N	N N	4	0.1	Public, Entire Public, Entire
310	Pond		H	Man-made	Y	N	NA NA	N	N	N	IVI	Ī	N	N	N	N	N	N	2	1.0	Public, Entire
311	Seep		L.	Looks like multiple seeps in this area, boundaries uncertain	N N	Y	Cabot	N	N	Ĺ	М	N	N	N	N	N	N	N	3	2.4	Public, Entire
312	Beaver Wetland		H	Small beaver flooding at headwaters of stream	Y	Y	Cabot	M	Ĺ	M	M	L	N	N	Ĺ	N	N	N	7	3.7	Public, Entire
313	Beaver Wetland		H	Small beaver flooding at headwaters of stream	Y	Y	Cabot	M	L	L	М	L	L	N	L	L	N	N	8	2.7	Public, Entire
314	Beaver Wetland		Н	Small beaver flooding	Υ	Υ	Cabot	M	L	L	M	L	L	Ν	L	L	N	N	8	2.6	Public, Entire
315	Red Maple-Black Ash Swamp	Alder/Willow Swamp	M	Small swamp adjacent to conifer swamp	N	N	NA	L	N	L	M	N	L	Ν	N	M	N	N	6	2.1	
316	Old Field	Shallow Emergent Marsh	M	Small drainage through field into swamp	N	N	NA	N	N	N	L	N	N	N	N	L	N	N	2	0.9	
317	Pond		Н	Man-made	N	N	NA	N	N	N	L	L	N	N	N	L	L	N	4	0.1	
318	Pond		H	Man-made	N	N	NA	N	N	N	L	L	N	N	N	N	L	N	3	0.1	
319	Pond		Н	Farm pond	N	N	NA	N	N	N	L	L	N	N	N	N	N	N	2	0.1	

Wetland II	Natural Community	Natural Community 2	Confidence	Comments	VSWI HY	YDRIC	HYDRICTYPE	VP HABITAT	FLOOD		WILD / LIFE	FISH- ERIES	EXEMPLRY NC	RTE	EROSION CTL		REC E			ACRES	CONSERVED
321	Pond		Н	Man-made	N N	N	NA	N	N	N		L	N	N	N N	N		N	3	0.1	JJJLVLD
322	Alder/Willow Swamp	Cattail Marsh	С	Nice looking shrub swamp, old drainage ditch on SE side ?	Υ	Υ	Muck	L	N	L	L	N	N	Ν	N	L	N	N	3		Public, Part
323	Hemlock-Fir-Ash Seepage Swamp		Н	Wooded swamp on edge of marsh, typed by J.Mohr	Υ	Υ	Limerick	L	N	N	M	N	М	Ν	N	N	N	N	4	3.5	
324	Shallow Emergent Marsh	Alder/Willow Swamp	C	Nice looking wetland, mixed shrub/herbaceous	Y	Y	Limerick	L	N	N	L	N	N	N	N	L	N	N	2	6.7	
325 326	Old Field Old Field	Shallow Emergent Marsh Alder/Willow Swamp	L H	Needs field verification Sloping wetland above marsh	N Y	N	NA Cabot	N	N	N	L	N N	N N	N	N	N	N N	N	1 5	0.9 4.4	Public, Entire
327	Shallow Emergent Marsh	Alder/Willow Swarrip	H	Includes open water at times	Y	Y	Cabot	IN I	ī	L.	M	L	N	N	i	į.	N	N	7		Public, Entire
328	Alder/Willow Swamp		C	Shrub swamp adjacent to large marsh	Ý	Ϋ́	Limerick	N	M	M	M	Ē	N	N	N	Ĺ	N	N	8		Public, Part
329	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	H	Large and significant wetland, very diverse, includes open water	Υ	Υ	Limerick	M	L	M	Н	M	L	Ν	M	M	N	N	13		Public, Part
330	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	Н	Nice looking beaver flooding, diverse, includes open water	Υ	Υ	Cabot	M	L	M	Н	M	L	Ν	L	L	N	N	11		Public, Entire
331	Old Field	Alder/Willow Swamp	М	Wetland along stream, needs field verification	Y	Y	Limerick	N	M	М	L	L	N	N	M	L	N	N	9	13.8	
332	Old Field	Alder/Willow Swamp	M M	Shrubby vegetation in field, looks wet	N	Y	Limerick	N	L N	M	L M	N N	N	N N	N N	N	N N	N	4 3	5.7	
333 334	Vernal Pool Seep	Seep Vernal Pool	M	Potential seep or vernal pool in mixed forest Vernal Pool or seep on summit	N N	N N	NA NA	H M	N N	L N	M	N N	IN N	N	N N	N N	N N	N N	2	0.1 0.1	
335	Seep	Vernal Pool	M	Vernal pool or seep on summit	N	N	NA NA	M	N	N	M	N	N	N	N	N	N	N	2		Public, Part
336	Pond		Н	Man-made	N	Υ	Cabot	N	N	N	L	L	N	Ν	N	N	L	N	3	0.1	,
337	Pond		Н	Man-made	N	N	NA	N	N	N	L	L	N	Ν	N	N	L	N	3	0.1	
338	Alder/Willow Swamp		С	Large, nice looking swamp	N	Y	Limerick	N	L	М	М	N	N	N	L	L	N	N	7		Public, Entire
339	Old Field		М	Shrubby wetland in field	N	N	NA	N	N	N	N M	N	N	N	N	N	N	N	0 6		Public, Entire
340 341	Shallow Emergent Marsh Alder/Willow Swamp	Old Field	H H	Open water and herbaceous vegetation along stream Shrub wetland with scatterd conifers	N N	Y	Scarboro Scarboro	L .	L	L	IVI I	L	IN NI	IN N	L	IN NI	N N	N N	5		Public, Entire Public, Entire
342	Old Field	Alder/Willow Swamp	M	Roadside shrubby wetland, boundaries uncertain	N	Y	Scantic	N	N	N	ī	N	N	N	N	N	N	N	1		Public, Part
343	Old Field	Agricultural Field	M	Small wet corner of field	N	Ϋ́	Scantic	N	N	N	N	N	N	N	N	N	N	N	0		Public, Entire
344	Alder/Willow Swamp	3	С	Shrubby swamp along stream, has upland inclusions	Υ	N	NA	N	N	L	L	N	N	Ν	N	L	N	N	3	1.2	,
345	Alder/Willow Swamp		L	May not be wet, looks slightly sloped	Υ	Υ	Cabot	N	L	L	L	N	N	Ν	L	N	N	N	4	0.9	
346	Alder/Willow Swamp	Old Field	С	Shrubby old field, mixed shrub and herbaceous vegetation	N	N	NA	N	N	L	L	N	N	Ν	N	L	N	N	3	2.7	
347	Agricultural Field		L	Looks only marginally wet, needs field verification	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.3	
348	Pond		H C	Man-made	Y	N	NA NA	N	N N	N N	L	L N	N N	N N	N N	N	L N	N	3	0.3 1.4	
349 350	Alder/Willow Swamp Pond		Н	Historically part of larger wetland to north  Man-made	Y N	N N	NA NA	IN N	IN I	IN I	L	IN I	IN NI	N N	N N	L N	IN I	N N	5	0.1	
351	Old Field		 L	Sloping field, may be wet, needs verification	N	N	NA NA	N	N	N	N	N	N	N	N	N	N	N	0	0.6	
352	Pond		H	Man-made	Y	Y	Cabot	Ĺ	N	N	L	Ĺ	N	N	N	N	Ĺ	N	3	0.1	
353	Old Field	Alder/Willow Swamp	Н	Sloping shrubby wetland	Υ	Υ	Limerick	N	M	M	M	N	N	Ν	L	L	N	N	8	4.3	
354	Old Field	Shallow Emergent Marsh	М	May be part of larger marsh to SW	Υ	Υ	Scantic	N	L	M	L	N	N	Ν	L	N	N	N	5	2.6	
355	Agricultural Field		М	Marginally wet sloping field, needs field verification	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.2	
356	Pond		Н	Man-made	Y	N	NA	N	L N	L	L	L	N	N	N	N	L	N	5	0.5	
357 358	Pond Seep		H	Man-made Potential seep at headwaters	N N	N N	NA NA	N	N N	IN I	M	L	N N	N	N N	IN NI	L N	N N	4	0.1 0.3	
359	Old Field		Ī	Potentially wet area in field, needs field verification	N	N	NA NA	N N	N	N	I	N	N	N	N	N	N	N	1	0.3	
360	Pond		H	Man-made	Y	N	NA	N	N	N	Ĺ	Ĺ	N	N	N	N	Ĺ	N	3	0.3	
361	Alder/Willow Swamp		С	Small shrubby wetland along stream	N	N	NA	N	L	М	L	N	N	Ν	L	L	N	N	6	1.4	
362	Old Field	Agricultural Field	M	Shrubby wet area in middle of field	N	Υ	Enosburg	N	N	N	N	N	N	Ν	N	N	N	N	0	0.6	
363	Old Field		L	Shrub or treed drainage through field, needs verification	N	N	NA	N	N	N	L	N	N	Ν	N	N	N	N	1	1.6	
364	Beaver Wetland	Emergent Marsh	Н	Mostly open water, nice looking beaver wetland	Y	Y	Muck	M	L	L	M	M	Ŀ	N	L	N	N	N	8		Private, Entire
365 366	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	H	Nice looking series of beaver dams along stream, includes open water	Y	Y N	Limerick NA	M M	L	L M	M	M M	L	N	L	N N	N N	N N	8 9		Private, Part Private, Part
367	Beaver Wetland Poor Fen	Emergent Marsh	C	Nice looking beaver wetland, mostly in Bolton, includes open water State significant fen	Y	N	NA NA	N	N	N N	IVI I	N	Н	Н	N	IN I	N	N	8	1.3	riivale, rait
368	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	Č	Large, diverse and significant wetland, inlcudes open water	Ý	Y	Scarboro	M	Ĺ	H	H	М	i.	N	M	M	N	N	14		Private, Part
369	Old Field	Alder/Willow Swamp	М	On margin of large beaver wetland	Υ	Υ	Scantic	N	L	M	M	N	N	Ν	L	N	N	N	6	2.3	,
370	Shallow Emergent Marsh	Old Field	Н	Old oxbows with marsh and open water	Υ	Υ	Limerick	L	M	M	M	L	N	Ν	L	N	N	N	8	1.9	
371	Pond		М	Pond associated with old pit	Y	N	NA	L	N	N	L	N	N	N	N	N	N	N	1		Public, Entire
372	Pond	For a constant Name to Alder (AA/SII Occasion	М	Pond associated with old pit	Y	N	NA	L M	N	N M	L	N M	N	N	N	N		N	1		Public, Entire
373 374	Beaver Wetland Hemlock-Fir-Ash Seepage Swamp	Emergent Marsh, Alder/Willow Swamp	H M	Large and diverse beaver wetland, inlcudes open water State significant swamp, headwaters swamp	Y N	Y	Muck Muck	IVI I	L N	IVI I	H M	N N	H	N N	L N	L N	N N	N N	11 6		Public, Entire Public, Entire
375	Dwarf Shrub Bog		H	Otter Bog, state singificant peatland	Y	Ϋ́	Muck	N	N	N	L	N	н	M	N	N	N	N	6		Public, Entire
376	Poor Fen	Sweet Gale Shoreline Shrub Swamp	Н	Peatland type surrounding bog	Ϋ́	Y	Muck	N	N	N	Ĺ	N	М	М	N	N	N	N	5		Public, Entire
377	Deep Broadleaf Marsh	Pond	Н	Natural pond with aquatic vegetation surrounding a peatland	Υ	Υ	Muck	L	N	L	Н	M	L	N	N	N	N	N	7	10.9	Public, Entire
378	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	Н	Nice looking diverse beaver wetland, inlcudes open water	Υ	N	NA	M	L	L	Н	M	L	N	L	N	N	N	9		Public, Entire
379	Shallow Emergent Marsh		H	May be (or have been) beaver influenced, includes open water	Y	N	NA	L M	N	N	М	N	N	N	N	L	N	N	3		Public, Entire
380 381	Pond Hemlock-Fir-Ash Seepage Swamp	Northern Hardwood Seepage Forest	H	Natural pond, may be beaver influenced VSWI wetland, but looks marginal and sloping, needs field verification	Y	N N	NA NA	IVI N	IN N	N N	M	L N	IN I	IN N	N N	IN NI	N N	N N	3		Public, Entire Public, Entire
382	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	Н	Small but diverse beaver wetland, inloudes open water	Y	N	NA NA	IN I	IN I	IN I	M	IN I	i i	N	IN I	N N	N	N	7		Public, Entire
383	Old Field	Alder/Willow Swamp	M	Shrubby field, VSWI mapped but looks marginal, needs verification	Ý	N	NA	N	N	N	L	N	N	N	N	N	N	N	1	2.4	Tublic, Little
384	Shallow Emergent Marsh	Seep	М	? Part of drainage into larger wetland, some open water	N	Υ	Muck	Ĺ	N	N	Ĺ	N	N	N	N	N	N	N	1		Public, Entire
385	Shallow Emergent Marsh	Seep	M	? Part of drainage into larger wetland ?	N	N	NA	L	N	N	L	N	N	Ν	N	N	N	N	1	0.2	Public, Entire
386	Seep	Vernal Pool	M	Small isolated wetland above river	N	N	NA	L	N	N	M	N	N	N	N	N	N	N	2		Public, Entire
387	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	Н	Small, nice looking wetland, inlcudes open water	Y	N	NA	М	N	L	М	L	L	N	N	N	N	N	5		Public, Entire
388	Beaver Wetland	Emergent Marsh Alder/Willow Swamp	H	Nice looking small beaver wetland, includes open water	Y Y	N N	NA NA	M M	N	L	M H	М	L	N	N	N	N	N N	6 8		Public, Entire
389 390	Beaver Wetland Beaver Wetland	Emergent Marsh, Alder/Willow Swamp Emergent Marsh	H	Nice looking, diverse beaver wetland, includes open water, may include conifer swamp Small beaver flooding, inlcudes open water	Y	N N	NA NA	M M	L	IVI I	M	L	L NI	IN NI	N N	IN NI	N N	N N	5		Public, Entire Public, Entire
391	Beaver Wetland	Emergent Marsh, Alder/Willow Swamp	н	Beaver influenced wetland with open water and marsh	Ϋ́	N	NA NA	IVI 	Ĺ	М	H	М	N	N	L	N	N	N	9		Public, Entire
392	Beaver Wetland	Shallow Emergent Marsh	н	Marsh along stream	Ϋ́	N	NA	N	Ĺ	M	M	M	N	N	Ĺ	N	N	N	8		Public, Entire
393	Pond	Shallow Emergent Marsh	Н	Natural pond with ring of marsh, may be beaver influenced	Y	N	NA	М	N	L	М	L	N	Ν	N	L	N	N	5		Public, Entire
394	Pond	-	Н	Man-made	N	N	NA	N	L	L	L	L	N	Ν	N	N	L	N	5	0.1	
395	Pond		Н	Man-made	N	N	NA	N	L	L	L	L	N	N	N	N	L	N	5	0.1	
396	Old Field		L	Shrubs along drainage, looks only marginally wet, needs verification	N	N	NA	N	N	N	N	N	N	N	L	N	N	N	1	0.1	
397 398	Red Maple-Black Ash Swamp Northern Hardwood Seepage Forest		С	Looks only marginally wet from road	N N	N N	NA NA	N	N N	N N	L N	N N	L N	N N	N N	N N	N N	IN NI	2	0.1 0.2	
	Shallow Emergent Marsh		C	Looks marginally wet from road, extent uncertain Narrow wetland along drainage	N N	N N	NA NA	N N	N N	IN I	N N	N N	N N	N	IN I	N N	N N	N N	2	0.2	
399																					

Wetland IE	Natural Community	Natural Community 2	Confidence Comments	VSWI	HYDRIC	HYDRICTYPE	VP   HABITAT	FLOOD WATER		WILD LIFE		XEMPLR NC	RTE			FREC E		SUM	ACRES	CONSERVED
401	Pond	•	C Man-made	N	N	NA	N	N	N	L	L	N	N	N	N	L	N	3	0.1	
402	Agricultural Field		C Low area in agricultural field	N	Υ	Enosburg	N	N	N	N	N	N	N	N	N	N	N	0	0.1	
403	Shallow Emergent Marsh		<ul> <li>Part of large marsh system, dense reed canary grass</li> </ul>	Y	Υ	Scantic	N	N	L	L	N	N	N	N	L	N	N	3	3.3	
404	Shallow Emergent Marsh	Alluvial Shrub Swamp	C Wetland along stream; alder and joe-pye-weed	N	N	NA	N	L	L	L	L	N	N	M	L	N	N	7	1.7	
405	Floodplain Forest		M May be early successional, needs verification	Y	N	NA	N	M	L	L	L	N	N	Н	N	N	N	8	1.3	
406	Agricultural Field		C Small wet area in field	N	Y	Limerick	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
407	Old Field		C Small wet area in field, may be more extensive than mapped	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
408 409	Old Field Old Field	Alder/Willow Swamp	L Looks wet from road but needs field verification L Looks only marginally wet, needs field verification	N N	N	NA Cabot	N N	IN I	N	N	N N	N N	N N	N M	N	IN NI	N N	0 5	0.4 0.3	
410	Alder/Willow Swamp	Alder/Willow Swamp	C Small willow and cattail wetland along stream	N	N	NA	N	ī	ī	Ī	N	N	N	I	N N	N	N	4	0.3	
411	Old Field		C Small wet area dominated by giant reed grass	N	N	NA NA	N	N	N	N	N	N	N	N	N	N	N	0	0.1	
412	Agricultural Field		C Narrow wet area along drainage; grazed	N	N	NA NA	N	N	N	N	N	N	N	N	N	N	N	0	0.3	
413	Shallow Emergent Marsh		C Small roadside wetland, extent to east uncertain	Υ	N	NA	N	N	L	N	N	N	N	N	N	N	N	1	0.1	
414	Floodplain Forest		L VSWI wetland, but doesn't look wet from road	Υ	N	NA	N	L	L	N	N	N	N	M	N	N	N	4	2.0	
415	Shallow Emergent Marsh		C Small roadside wetland	N	Υ	Scantic	N	N	N	N	N	N	N	N	N	N	N	0	0.1	
416	Alder/Willow Swamp		<ul> <li>Narrow band of alders along creek, may con't to SW</li> </ul>	N	N	NA	N	L	L	L	N	N	N	L	N	N	N	4	0.1	
417	Shallow Emergent Marsh		C Small wet area in lawn	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
418	Shallow Emergent Marsh		C Roadside wetland at base of slope	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.2	
419	Shallow Emergent Marsh		M Small roadside wetland, looks marginally wet	N	Υ	Limerick	N	N	N	N	N	N	N	N	N	N	N	0	0.1	
420	Cattail Marsh		C Small marsh/ditch dominated by cattails	N	Y	Scarboro	N	N	N	L	N	L	N	N	N	N	N	2	0.2	
421	Cattail Marsh		C Small ditch or old pond site	N	N	NA	N	N	N	N	N	L	N	N	N	N	N	1	0.0	
422	Shallow Emergent Marsh		C Small roadside wetland	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
423	Alder/Willow Swamp		M Looks marginally wet from road; needs confirmation  M Shrubby wetland muck soils	N	N	NA	N N	N	N	N	N	N	N N	N	N	N	N	0	0.1	
424	Alder/Willow Swamp		m omassy wonana, mask cone	N N	Y	Muck	N N	IN N	IN N	N	N N	IN N	N N	IN N	IN N	IN N	IN N	0	0.1 0.1	
425 426	Alder/Willow Swamp		C Small roadside alder/willow swamp C Man-made	N N	Y NI	Cabot NA	N N	IN NI	IN NI	IN I	IN I	IN NI	N N	IN NI	IN I	IN I	IN NI	4	0.1	
427	Pond Alder/Willow Swamp		C Small roadside wetland	IN NI	V	Cabot	N	N N	N N	N	N	N NI	N	N NI	L N	N.	N N	0	0.0	
428	Shallow Emergent Marsh		C Small roadside wetland C Small roadside wetland, reed canary grass	N	I N	NA	N	N N	N N	N	N	N	N	N NI	N N	N N	N N	0	0.1	
429	Shallow Emergent Marsh		C Wetland along drainage	N	N	NA NA	N	I	I	IN I	N	N	N	IN I	I	N	N	5	0.1	
430	Shallow Emergent Marsh	Old Field	C Marsh, partially in lawn	N	Y	Limerick	N	N	N	N	N	N	N	N	ī	N	N	1	0.2	
431	Shallow Emergent Marsh	3.d	C Roadside wetland along drainage	N	N	NA	N	N	Ĺ	N	N	N	N	Ĺ	N	N	N	2	0.1	
432	Shallow Emergent Marsh		H Small roadside wetland	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
433	Alder/Willow Swamp		C Small roadside wetland	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
434	Old Field		C Upland and wetland mixed, willow and alder shrubs	Υ	Υ	Cabot	N	N	N	N	N	N	N	N	N	N	N	0	1.7	
435	Shallow Emergent Marsh	Alder/Willow Swamp	<ul> <li>Wetland along stream, NW boundary uncertain</li> </ul>	N	N	NA	N	L	L	L	N	N	N	L	N	N	N	4	0.2	
436	Alder/Willow Swamp		C Small wetland in bowl	N	Υ	Enosburg	N	N	L	L	N	N	N	N	N	N	N	2	0.1	
437	Agricultural Field		M Shrubby wet area in pasture, boundaries uncertain	N	Υ	Enosburg	N	N	N	N	N	N	N	N	N	N	N	0	1.5	
438	Old Field		C Small roadside wetland	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
439	Pond		C Man-made	Y	Υ	Limerick	N	N	N	N	L	N	N	N	N	L	N	2	0.2	
440	Agricultural Field		M Pasture, looks marginally wet, boundaries uncertain	N	Y	Limerick	N	N	N	N	N	N	N	N	N	N	N	0	0.2	
441	Alder/Willow Swamp		C Small roadside wetland at base of slope	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.1	
442	Seep		C Small roadside seep	N	N	NA	N	N	L	L	N	N	N N	N	N	N	N	2	0.0	
443 444	Alder/Willow Swamp		C Shrubby swamp in field C Marsh along drainage	N	N	NA Munson and Limerick	N N	IN I	IN I	L	N	IN N	IN NI	IN I	IN I	N	IN NI	1 5	0.1 1.9	Private, Part
445	Shallow Emergent Marsh Old Field		C Along stream; looks marginally wet	r N	I N	NA	N	L N	L N	N	N	N NI	N	į.	L N	N N	N N	1	0.5	riivale, raii
446	Old Field		C Small roadside wetland	N	V	Scantic	N	N	N.	N	N	NI NI	N	N	N N	N	N	0	0.0	
447	Cattail Marsh		C Old pond site filled with cattails	N	Ý	Munson	i i	N	N	i	N	i	N	N	N	N	N	2	0.1	
448	Shallow Emergent Marsh		C Southeastern boundary uncertain	N	Ý	Munson	N	N	ï	ī	N	N	N	ï	N	N	N	3	0.3	
449	Shallow Emergent Marsh		C Small roadside wetland, drains into ditch	N	Y	Munson	N	N	N	N	N	N	N	N	N	N	N	0	0.2	
450	Old Field	Shallow Emergent Marsh	C Wet pasture; drains into larger wetland	N	Υ	Munson	N	N	N	N	N	N	N	N	N	N	N	0	0.4	
451	Shallow Emergent Marsh	Alder/Willow Swamp	C Small roadside wetland	N	Υ	Cabot	N	N	N	N	N	N	N	N	N	N	N	0	0.3	
452	Shallow Emergent Marsh		C Narrow wetland along stream	N	Υ	Cabot	N	L	L	L	N	N	N	L	N	N	N	4	0.2	
453	Old Field		C Sloping old field	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0	0.3	
454	Alder/Willow Swamp		C Small alder swamp along intermittent stream	N	Υ	Cabot	N	L	L	N	N	N	N	L	N	N	N	3	0.1	
455	Alder/Willow Swamp	Red Maple-Black Ash Seepage Swamp	C Small roadside wetland, boundaries uncertain	N	Υ	Cabot	N	N	N	N	N	N	N	N	N	N	N	0		Public, Entire
456	Alder/Willow Swamp		C Small roadside alder swamp	N	N	NA	N	N	N	L	N	N	N	N	N	N	N	1		Public, Part
457	Old Field		C Small wet area in old field, cattails and reed canary grass	N	N	NA	N	N	N	N	N	N	N	N	N	N	N	0		Public, Entire
458	Old Field		C Small wet area by road	N	Y	Cabot	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
459	Alder/Willow Swamp		C Small shrubby wetland along road	N		Cabot	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
460	Alder/Willow Swamp	Alder/Willow Swore	C Small alder swamp patch in field C Small wet area in field	N	Y	Limerick	N N	IN N	N	N N	N	IN N	N N	N	N	N	N	0	0.1	
461 462	Old Field Alder/Willow Swamp	Alder/Willow Swamp	C Small wet area in field C Small patch of alder in field	N N	Y	Limerick Limerick	N N	N N	N N	N N	N N	N N	N N	N N	N N	N	N N	0	0.1 0.5	
462 463	Alder/Willow Swamp	Old Field	C Small patch of alder in field C Small roadside wetland	N N	Y N	NA	N N	N N	N N	N N	N N	NI N	N N	N N	N N	N N	N N	0	0.5	
463 464	Alder/Willow Swamp	Old Filelu	M Looks wet from road, but needs field verification	N N	N N	NA NA	N	M	M	14	IN I	N N	N N	IN I	N N	N	N	7	3.6	
465	Alder/Willow Swamp		M Boundaries uncertain, has upland inclusions	N	N	NA NA	N	M	IVI	ī	L	N.	N	M	I N	N	N	8	1.9	
466	Shallow Emergent Marsh		C Small roadside wetland	N	N	NA NA	N	N	N	N	N	N	N	N	N	N	N	0	0.1	
467	Shallow Emergent Marsh		C Small roadside wetland	N	N	NA NA	N	N	N	N	N	N	N	N	N	N	N	0	0.0	
468	Shallow Emergent Marsh		M Looks wet from road, but needs confirmation	N	N	NA	N	N	N	L	N	N	N	N	N	N	N	1	0.6	
469	Pond		H Man-made	N	N	NA	N	N	N	Ĺ	Ľ	N	N	N	N	Ĺ	N	3	0.3	
470	Hemlock-Fir-Ash Seepage Swamp		H Typed by J.Mohr	٧	N	NA				М	N	М	N	N	N	N	N	6	3.2	